AUGUST 1, 1950

MODERN MEDICINE

The Journal of Diagnosis and Treatment

Dr. Robert L. Bennett
(see page 11)

Table of contents
page 11

Just 4 small doses provide

'Round-the-clock relief for allergic patients

Long-lasting relief[1] . . . low milligram dosage[2] with few side actions. These are advantages you *expect* in a professional antihistamine for use in difficult allergies, or for patients who have not responded to other drugs. These advantages are *combined* in Decapryn—the antihistamine that provides a good night's rest and a good day's work for allergic patients.

1. "Symptoms were relieved from 4 to 24 hours after the administration of a single dose of Decapryn—" . . . Sheldon, J.M. Et al: Univ. Mich. Hosp. Bull. 14:13-15 (1948)
2. "It was found that 12.5 mg. could be given during the day with comparatively few side reactions and yet maintain good clinical results—" . . . MacQuiddy, E.L.: Neb. State M.J. 34:123 (1949)

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The long-lasting, low-dosage prescription antihistamine

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Available on prescription only, as pleasant-tasting liquid, or palatable tablets.

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.... suppresses appetite

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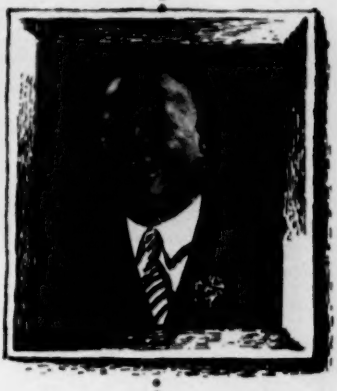

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YEARS OF OBSTINATE CONSTIPATION can be corrected in days with Cellothyl. Bargen[1] reports "striking" results in patients with "no ordinary form of constipation" but with life-long dysfunction.

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1. Gastroenterology *13*: 275 (Oct.) 1949. 2. N. Y. State J. Med. *48*: 1822 (Aug.) 1948.

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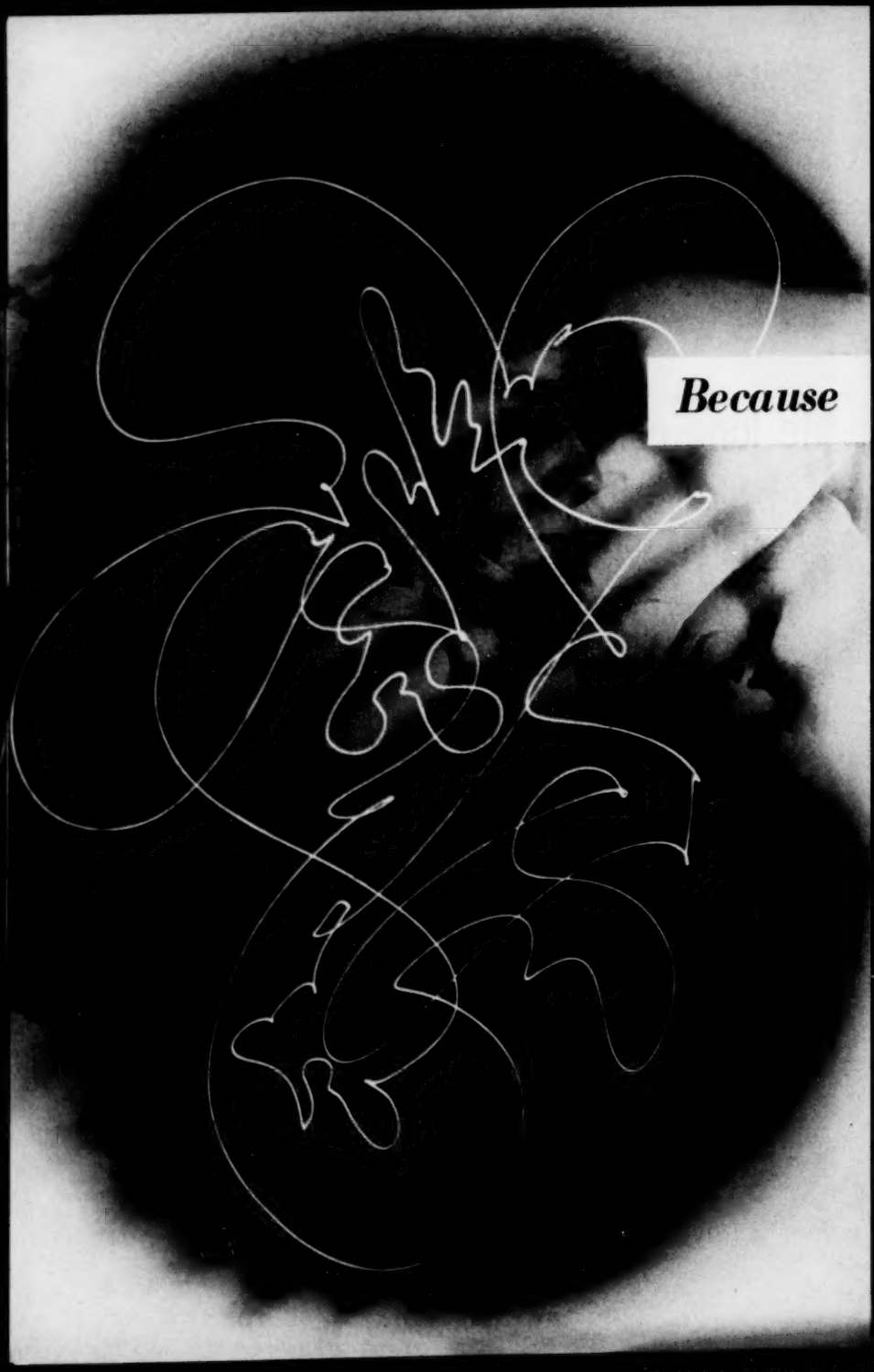
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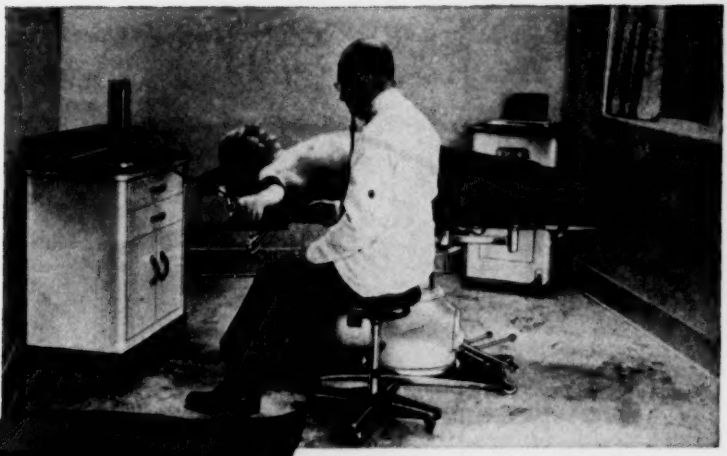
MODERN MEDICINE

THE JOURNAL OF DIAGNOSIS AND TREATMENT



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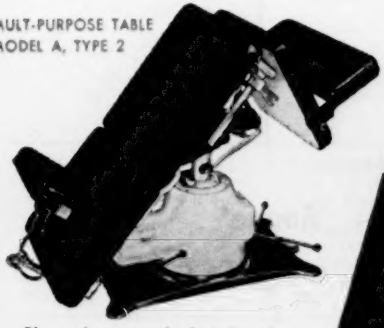

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Contents for August 1 1950

MODERN MEDICINE
VOL. 18, NO. 15

THE MAN ON THE COVER is Robert L. Bennett, M.D., a specialist in physical medicine whose particular interest is poliomyelitis. Dr. Bennett is Director of Physical Medicine at the Georgia Warm Springs Foundation, which was founded by the late President Franklin D. Roosevelt. Dr. Bennett is a frequent contributor of articles on physical medicine to scientific journals and is author of the Special Article, "Physical Medicine and Rehabilitation in Poliomyelitis," on page 43 of this issue.

Contents for August 1 1950

CONTINUED

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LETTER FROM THE EDITOR

Dear Reader:

Two plus two does not always equal four.

Perhaps you remember the story of the fullback who was better at plunging through the line than pulling down a D. He had failed in every test the math instructor had given. The coach pleaded for one more chance. The instructor wearily agreed that if the gridder could answer one question correctly the minimum eligibility requirements would be met. The question: What does two plus two equal?

The fullback chewed his pencil long and thoughtfully. Then his eyes brightened and he triumphantly wrote "three." The instructor left the room without a word. The coach, on the verge of apoplexy, turned to the player.

"Yah big lunk," he exploded, "everybody knows the answer is five."

The equations are not that simple in medicine, but opinion as to the correct answer is often just as diverse. This diversity of opinion makes the Medical Forum one of the most interesting and stimulating departments in ***Modern Medicine***.

As each issue is being prepared, our Editorial Committee selects for discussion two or three reports that touch on controversial points. Readers are encouraged to express their opinions. Often proofs are sent for comment to practitioners known to be particularly interested in the diagnostic or therapeutic problem involved. Usually the majority agree that the answer is four, but on occasion wide disagreement is revealed.

The Medical Forum is a sounding board for the serious and considered opinion of every doctor. He may be famed throughout the nation or he may be unknown outside his bailiwick. If he has a significant comment to make, the Medical Forum is available to him.

EDITOR

three wise considerations

In biliary stasis, Caroid and Bile Salts Tablets fulfill the need for a desirable threefold action as a—

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a new type antihistaminic

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INDICATIONS: Hay fever, vasomotor rhinitis, urticaria, allergic dermatitis and pollen asthma.

DOSAGE: 50 mg. (one product) once daily with water; may be increased to two or three times daily if required in very severe cases.

PREPARATION: 'Perazil' brand Chlorcyclizine Hydrochloride 50 mg. Compressed (scored). Bottles of 100.

1. Jones, S. H.: Annals of Allergy: Vol. 7, No. 4 (July-Aug.) 1949

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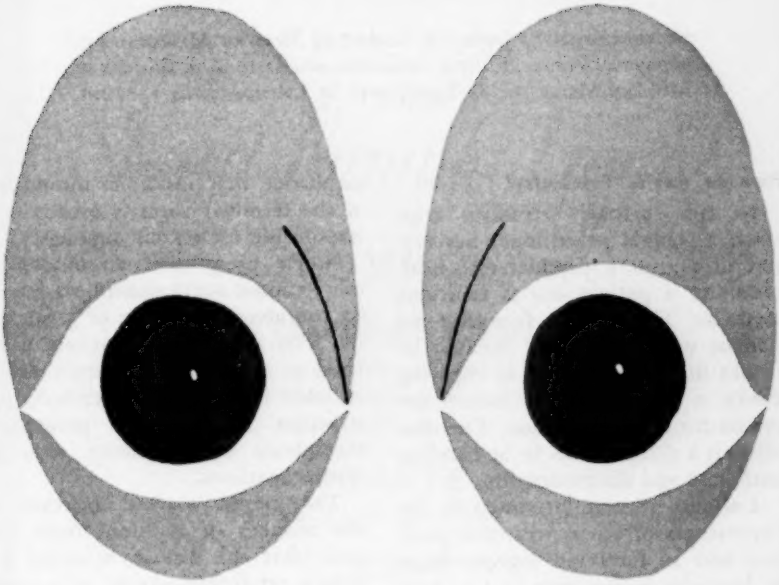

when your patient sees it daily . . . his "tonic" becomes an ever-present symbol of the reassuring and comforting fact that he is "in the care of his physician". Physicians know that, in addition to its tone-restoring and appetite-stimulating effects, this psychological aspect of a good tonic can often produce striking results. NEURO PHOSPHATES and THERANATES are both available in 12 fl. oz. bottles.
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Correspondence

Communications from the readers of MODERN MEDICINE *are always welcome. Address communications to The Editors of* MODERN MEDICINE, *84 South 10th St., Minneapolis 3, Minn.*

How to Advise Psychiatry?

TO THE EDITORS: Occasions arise when a general practitioner has reason to suggest a psychiatric consultation to a patient but is reluctant to do so. There is the fear that the patient will be incensed because he thinks that the physician is implying doubt as to his sanity, no matter the reason for the consultation. The situation is a delicate one, to be handled with tact and discrimination.

I would be very interested in the experiences of others with this problem and in receiving suggestions as to how this matter may best be handled.

EDWARD DENGROVE, M.D.
Asbury Park, N. J.

Cause of Sexual Impotence

TO THE EDITORS: In the Questions & Answers section of a recent issue of your excellent journal (*Modern Medicine*, June 1, 1950, p. 28) is a brief discussion of the etiology and therapy of loss of sustained erection. The same topic is dealt with in Queries and Minor Notes of the June 3 issue of the *Journal of the American Medical Association*.

In each instance the consultant pointed out that usually such cases are on a psychogenic, hormonal, or neurogenic basis. I should like to emphasize that insidious thrombosis of the terminal aorta is occasionally responsible for sexual impotency.

Slowly progressive thrombosis of the terminal aorta should no longer be considered a disease of great rarity. The syndrome is entirely unrelated to and is to be sharply differentiated from the acute embolic obstruction and rapidly progressive thrombosis so commonly seen in cardiac patients.

The recent marked increase in the number of reported cases suggests that the disease, so-called Leriche's syndrome, occurs with much greater frequency than is generally appreciated. Elkin and Cooper (*Ann. Surg.* 130:417, 1949) have recently reviewed the clinical features and treatment of insidious thrombosis of the terminal aorta. These authors discovered 10 cases in twenty months. I have had 2 personal cases during the past four months.

A provisional diagnosis of thrombotic occlusion of the distal aorta may be made whenever a patient complains of exertional pain in the hips and thighs, easy fatigability of the legs, or sexual impotency and examination discloses no pulsations in vessels distal to the umbilicus. Aortography will confirm the diagnosis and reveal the level of obstruction.

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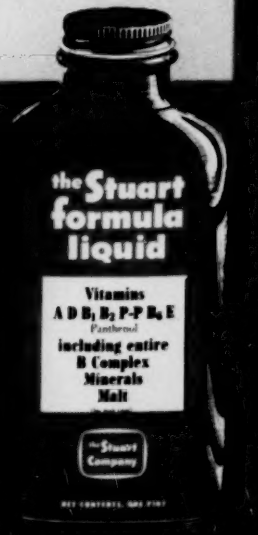

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Low in cost to patients. 30 cc. **$2.35**

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Treatment consists in bilateral lumbar sympathectomy, which destroys the vasoconstrictor nerve supply to the collateral vessels distal to the obstruction. If treatment is instituted before gangrene has appeared, relief of symptoms is remarkable in most cases.

It is to be emphasized that the thrombosis develops very gradually; the average duration of symptoms in the cases of Elkin and Cooper was seven years. The disease is not confined to the elderly arteriosclerotic group. Leriche's youngest patient was a woman of twenty-nine

Thrombotic obliteration of the terminal aorta should be considered in the differential diagnosis in cases of sexual impotency.

WALTER F. BECKER, M.D.
Little Rock, Ark.

Annual Arrival

TO THE EDITORS: The long-awaited *Annual* has been received, and your organization has done it again—meeting all the claims you had made and meriting a thunderous outburst of huzzahs!

HAROLD T. LOKSA, M.D.
Bayonne, N. J.

combined anesthetic-lubricant
action facilitates cystoscopy, proctoscopy
and other endoscopic procedures

relieves anal and rectal pa
especially valuable postoperatively
Each package contains an anorectal applicato

protective anesthetic dressing for
painful first and second degree burns

Questions & Answers

All questions received will be answered by letter directed to the petitioner; questions chosen for publication will appear with the physician's name deleted. Address all inquiries to the Editorial Department, MODERN MEDICINE, *84 South Tenth Street, Minneapolis 3, Minnesota.*

QUESTION: Please outline a recommended course of therapy for a patient whose prostate gland is infected with *Trichomonas vaginalis*.

M.D., West Virginia

ANSWER: *By Consultant in Urology.* Eradication of *Trichomonas vaginalis* from so complicated a structure as the prostate gland is very difficult without an effective agent that will kill the organism upon systemic administration. Since something like 100 different drugs and chemicals have been recommended for treatment of this disease in the female, we may conclude that no one method is likely to be satisfactory.

The first step is to make sure that the patient does not have urethral stricture and that no complicating bacteria are associated with the infection. This is best done by culturing the combined urine and prostatic secretion. If bacteria are found, appropriate antibiotic therapy should be utilized. If stricture is present, urethral dilatation should be employed. If pus is found in the prostatic secretion, massage two or three times weekly may be desirable.

The various arsenicals used in the treatment of syphilis may be tried, either orally or intravenously according to the preparation, but without much prospect of benefit. The instillation into the prostatic and anterior urethra of a 3% solution of neoarsphenamine may also be tried.

QUESTION: Why does neurologic examination of a sixty-five-year-old man with cerebral hemorrhage resulting in complete hemiplegia of the right side yield a positive Babinski on the unaffected left foot and a normal plantar response on the paralyzed right side?

M.D., Massachusetts

ANSWER: *By Consultant in Neurology.* The patient described undoubtedly has a very extensive lesion with a great deal of irritation of the brain bilaterally from the edema. It is not uncommon in such cases to obtain a positive Babinski sign bilaterally or on the side opposite the lesion.

QUESTION: Please tell me the simplest practical way to determine by roentgenography if the bony pelvis is large enough to permit normal delivery at term.

M.D., Tennessee

ANSWER: *By Consultant in Roentgenology.* A number of methods of pelvic mensuration by roentgen study

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DIABETIC DIET

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2. **Permits dishes containing a minimum of available carbohydrates,**
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are described by H. C. Moloy and P. C. Swenson in Chapter 10 of the looseleaf textbook, *Diagnostic Roentgenology*, edited by Ross Golden and published by Thomas Nelson & Sons. Additional references are: *Clinical Roentgenology of Pregnancy* by William Snow, Charles C Thomas, 1942; "The Accuracy of Roentgen Estimates of Pelvic and Fetal Diameters," A. L. Dippel and E. Delfs, *Surg., Gynec. & Obst.* 72:915-922, 1941; "Roentgen Pelvimetry and Fetometry," P. C. Hodges, *Am. J. Roentgenol.* 37:644-662, 1937; "Elastic Ruler for Roentgen Pelvimetry," Cesare Gianturco, *Radiology* 49:95-96, 1947.

Probably the simplest practical method for determining mensuration of the bony pelvis is that of Snow. A slide rule called Snow Calculator is available for easy computation. Directions are given with the rule. By making two films, an anteroposterior and a lateral, distortion can be corrected and a fairly accurate measurement of the pelvic diameters determined. The methods of Dippel or Hodges, which are quite similar, are probably more precise but require more complicated calculations than the Snow method.

QUESTION: Can large doses of streptomycin or aureomycin cause swelling of the liver?

M.D., New York

ANSWER: *By Consultant in Internal Medicine.* No.

depression causes . . .

loss of appetite,
which leads to . . .

inadequate dietary intake
and, consequently, to . . .

B vitamin deficiency,
resulting finally in . . .

apathy, fatigue and physical debility

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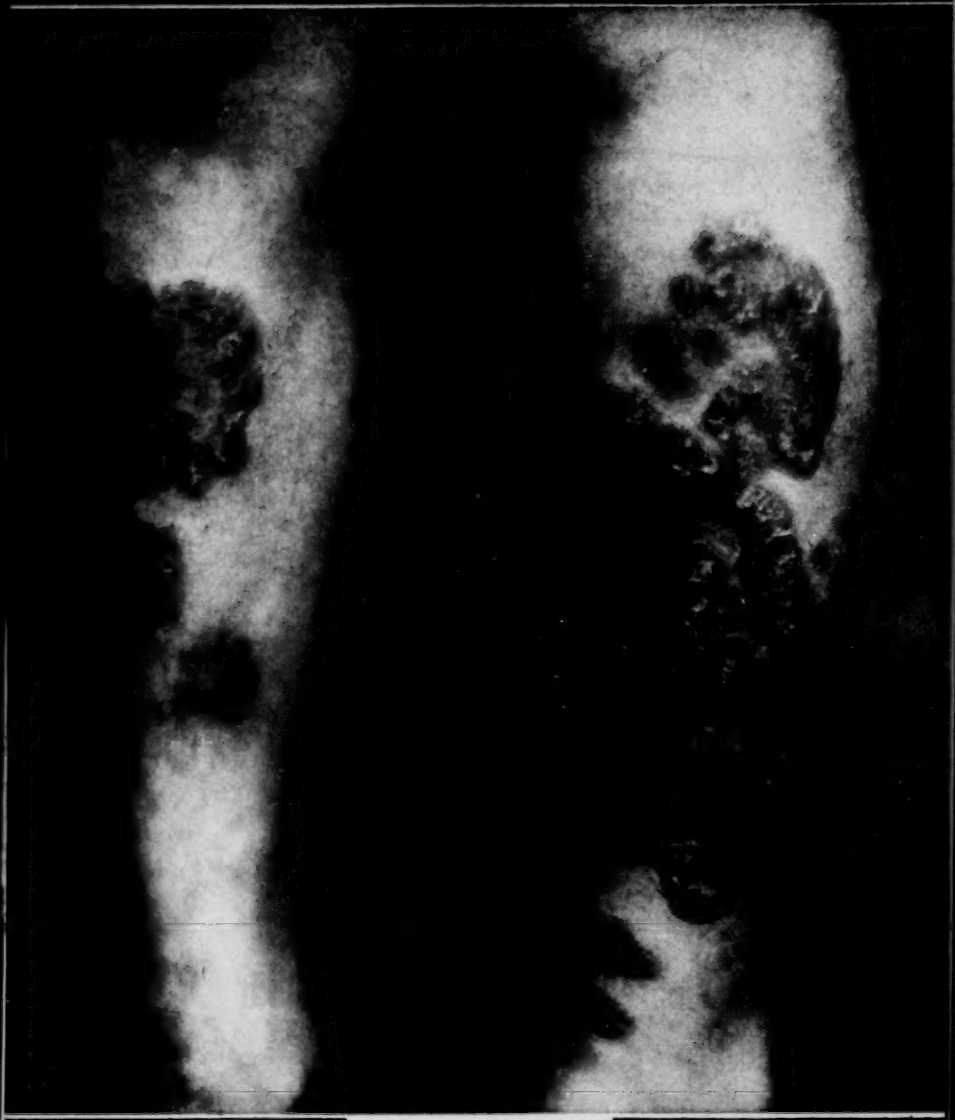

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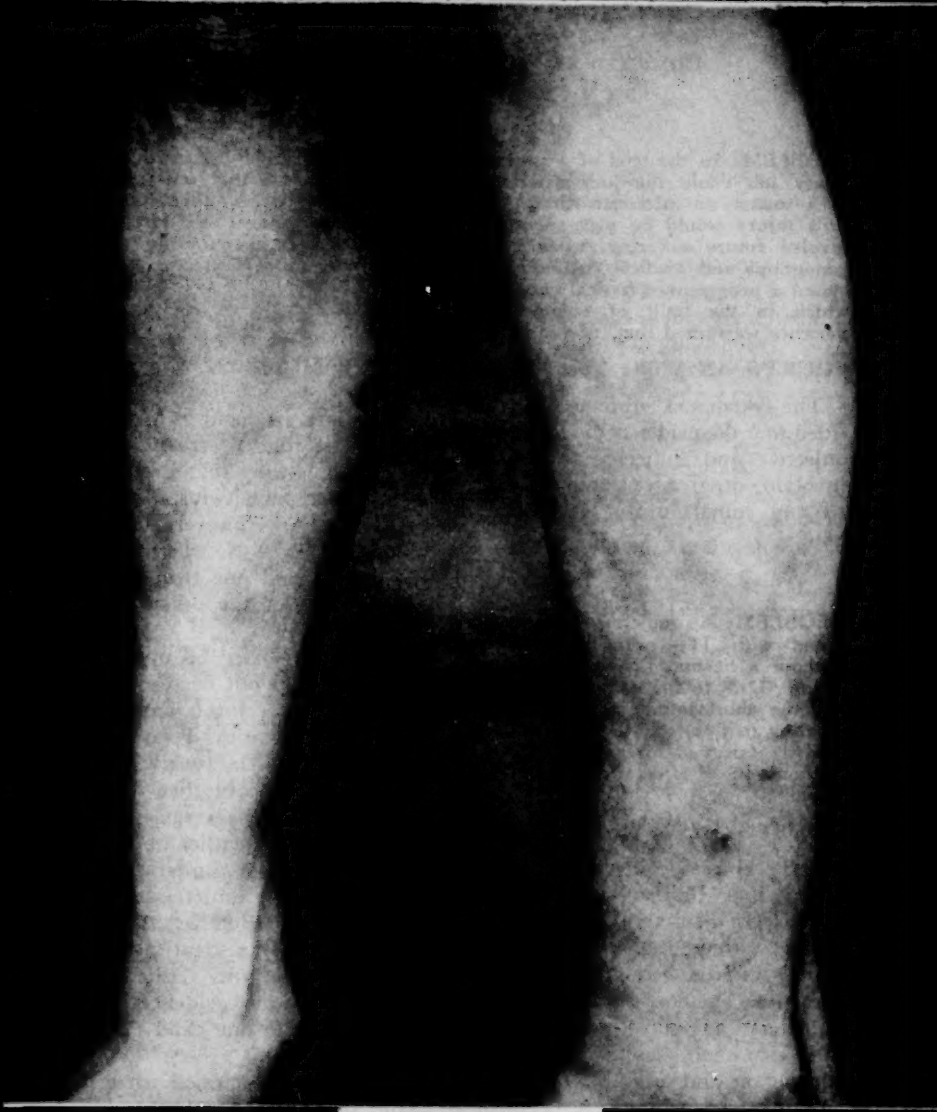

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Forensic Medicine

COMPILED BY ARTHUR L. H. STREET, LL.B.

PROBLEM: In the trial of a personal injury suit could the jury determine, as a matter of inference, that plaintiff's injury would be permanent and involve future suffering, when roentgenograms and medical testimony disclosed a progressive physical condition, which in the light of common experience warranted that inference?

COURT'S ANSWER: Yes.

The Oklahoma Supreme Court decided that the evidence disclosed both objective and subjective conditions, involving progressive traumatic arthritis and spinal injury (212 Pac. 2d 469).

PROBLEM: An indictment charged accused with [1] practicing medicine without a license, [2] unlawfully prefixing "Dr." to his name, and [3] using the abbreviation in an occupation relating to public health and diagnosis and treatment of disease. Could a conviction on the second count alone stand?

COURT'S ANSWER: No.

The Florida Supreme Court decided that the conviction implied an acquittal on the charges of practicing without a license and using "Dr." in connection with medical practice. The court noted that many "doctors" are not medical doctors and that there was no proof that, if defendant did use the title, "Dr.," he intended to pose as a medical practitioner (45 So. 2d 118).

PROBLEM: The jury in a bastardy proceeding found that respondent was the father of twins, although careful blood-grouping tests ordered by the court indicated nonpaternity. Was he entitled to a new trial?

COURT'S ANSWER: Yes.

Eleven blood tests were made by a widely recognized expert. The blood was secured by 3 physicians, who testified in detail as to the steps taken. The results were identical in each test, showing that the blood of man, woman, and twins all belonged to Group A. However, the man's blood was Type N, whereas that of the mother and one twin was Type M and that of the other twin was Type MN.

The expert based his opinion that the man could not be the father on two grounds: [1] the biologic rule that a parent with Type N blood cannot have a child with Type M, and [2] the theory that the father of twins must be the same man.

Upholding a verdict of nonpaternity, the Maine Supreme Judicial Court found it unnecessary to consider the question as to whether there must be an identical father of twins, because the verdict was indivisible; if the evidence excluded paternity as to one child there must be a new trial.

The court reaffirmed what it had said in a previous case, that the

(Continued on page 34)

quick relief and healing

in peptic ulcer...

Resinat, pepsin inactivator and antacid, brings quick relief of pain and speeds healing of peptic ulcer.

Weiss, S., et al.,[1] used Resinat in the treatment of 120 ulcer patients. These investigators report "symptomatic relief occurred within 48-72 hours and x-ray follow-up showed regression of ulcer crater in two to four weeks."

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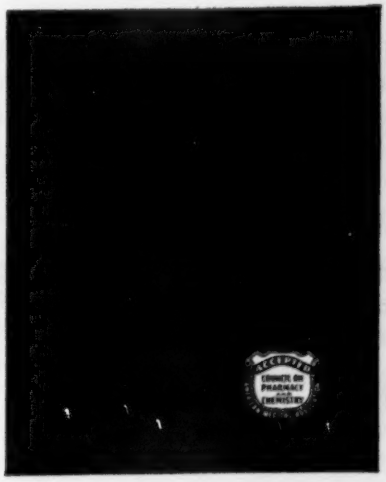
1. Weiss, S., et al.: Rev. Gastroenterology 16:501-509 (June) 1949.

Literature and samples available.



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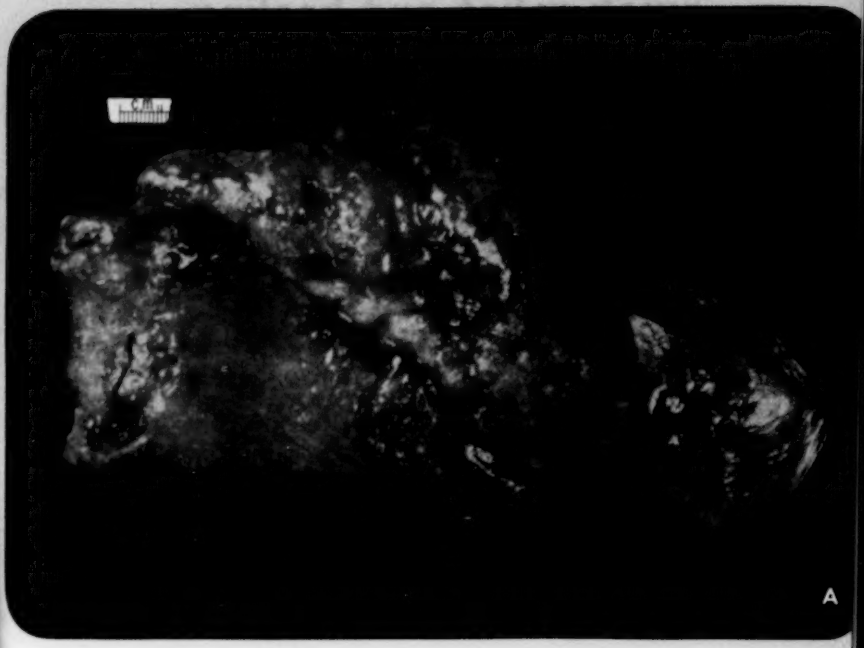

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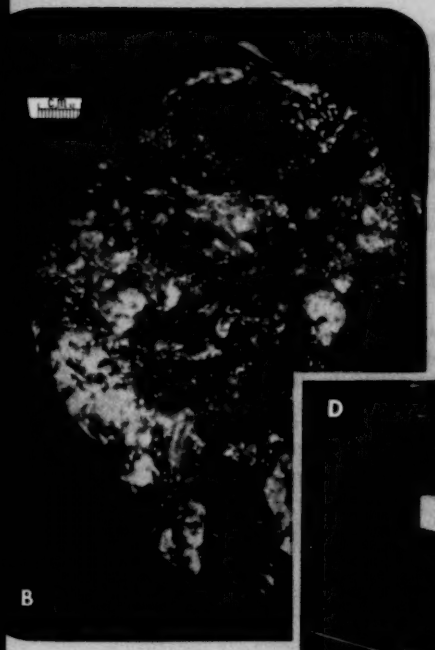

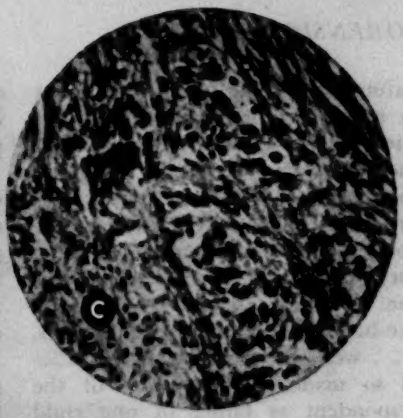

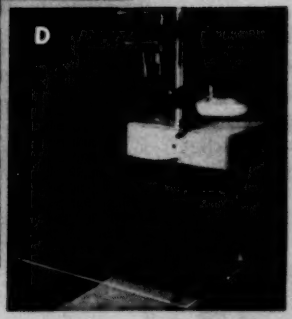

Reproductions **A** *and* **B** *show gross aspects of diseased lung after pneumonectomy. Reproduction* **C** *shows photomicrograph made from histological section of affected lung. Reproduction* **D** *shows setup of Kodak Flurolite Enlarger fitted with Camera components for the photography of gross specimens.*

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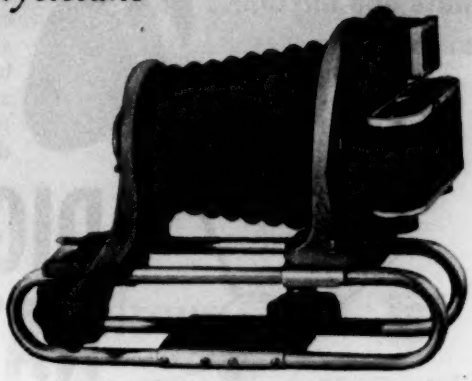

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statute authorizing use of blood tests in bastardy proceedings accepts the scientific view "that even though such tests cannot prove paternity, they may in certain instances disprove it. . . . Such a law goes beyond the opinion of an expert. The jury has the duty to determine if the conditions existed which made the biological law operative. That is, . . . were the tests properly made? If so made, the exclusion of the respondent as father of one child follows irresistibly."

The court added that its decision in the previous case did not indicate "that a jury may give such weight as it may desire to biological law." If the jury found in this case that the results of the tests were inaccurate, it must have been on mere conjecture or "understandable sympathy for the mother."

But the court rejected argument on behalf of respondent that the court had no jurisdiction to entertain a bastardy proceeding involving twins—that there should have been a separate proceeding as to each child (69 Atl. 2d 670).

PROBLEM: Was a physician guilty of murder in the second degree if he intentionally used means to destroy an unborn child or to produce miscarriage, without intending, in good faith, to save the mother or the child?

COURT'S ANSWER: Yes.

The West Virginia Supreme Court of Appeals upheld conviction in

this case. The defendant was sentenced to imprisonment for not less than five years and not more than eighteen.

Under a statute of that state, the court decided that an indictment charging murder was proper without specifying that the fatal act consisted in performing a criminal abortion.

The court also said that the trial judge did not err in permitting the prosecution to show that accused had performed other criminal abortions within five years—not as tending to prove that the accused had committed the specific offense charged, but as indicating a systematic course of criminal conduct (57 S.E. 2d 513).

PROBLEM: Was a family physician, who remained in charge of the case, jointly liable with an orthopedist for negligent diagnosis and treatment of a fractured humerus?

COURT'S ANSWER: Yes.

The Wisconsin Supreme Court stressed the facts that the family physician had remained in active charge and was negligent in not securing roentgenograms to determine the position of the bones that had been set and the progress of healing. These facts, the court said, differentiated the case from an earlier one (183 Wis. 382, 197 N.W. 333) in which a family physician was held not jointly responsible with an operating surgeon, whom he assisted (41 N.W. 2d 620).

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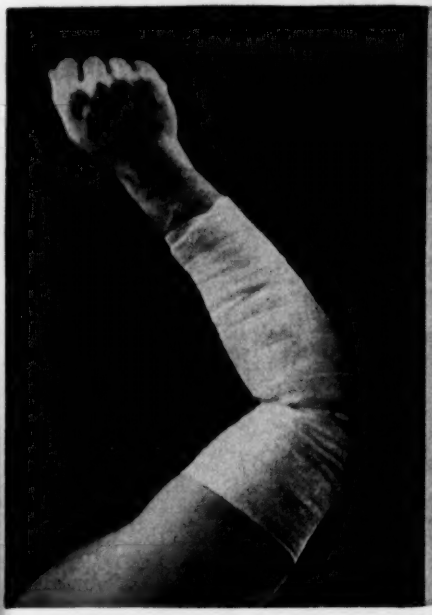

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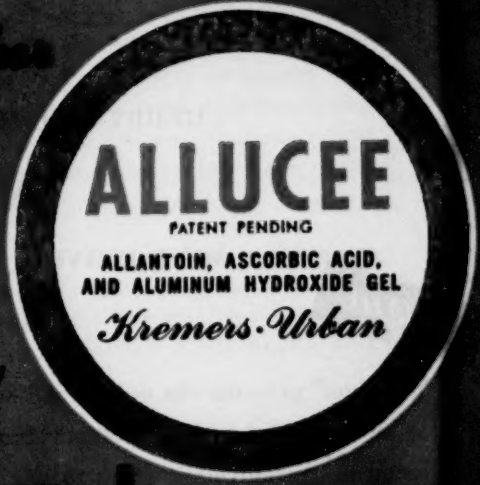

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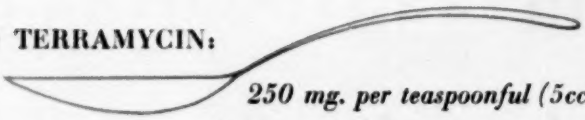

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Special Article

Physical Medicine and Rehabilitation in Poliomyelitis

ROBERT L. BENNETT, M.D.*
Georgia Warm Springs Foundation, Warm Springs, Ga.

Prepared for Modern Medicine

THE general practitioner is frequently called on to care for the patient with the after effects of acute anterior poliomyelitis. Above all else, the physician who accepts this responsibility must realize that the end results depend not only on the site and extent of damage to the central nervous system by the virus during the acute stage, but on what he does with what is left intact and recoverable during all the remaining years of the patient's life.

Even when only slight weakness remains after the acute stage, the problem of regaining effective use of skeletal musculature and of maintaining good skeletal alignment throughout the patient's lifetime is difficult. The only solution lies in a sound knowledge of normal bodily mechanics, long experience in the effects of faulty bodily mechanics on muscles, bones, and joints, and appreciation of the psychic trauma which follows the patient's recognition of his physical limitation and deformities.

These basic requirements, coupled with a deep sense of responsibility to see the patient through the many years of recovery and adaption, are essential to adequate care. Unless these requisites can be met, the physician must not take

* Director of Physical Medicine, Georgia Warm Springs Foundation.

over a problem so difficult and exacting as that presented by the after effects of poliomyelitis. Some points of basic importance are outlined briefly in the following pages.

The child with poliomyelitis presents far more difficult problems than the adult with comparable involvement.

In the adult, the basic problems are restoration of muscle strength and function, followed by resumption of activity within the limits imposed by the residual disability and by the future security of skeletal structures, and the compromise and adjustment necessary to return to a normal environment. Obviously, the problem varies with the extent of involvement but in all phases is clearly outlined.

The child has all these difficulties and, in addition, that of skeletal growth. In the presence of muscle weakness, the effect on bone growth of changes in the child's height, weight, and scope of activity is the most difficult problem in the care of poliomyelitis.

The general practitioner must recognize this fact and guide the patient and his family over the long years that are required for optimum results. Even when involvement is apparently slight, the growing child is constantly faced with the possibility of skeletal deformity. Practically all these deformities can be minimized if recognized early and wisely treated.

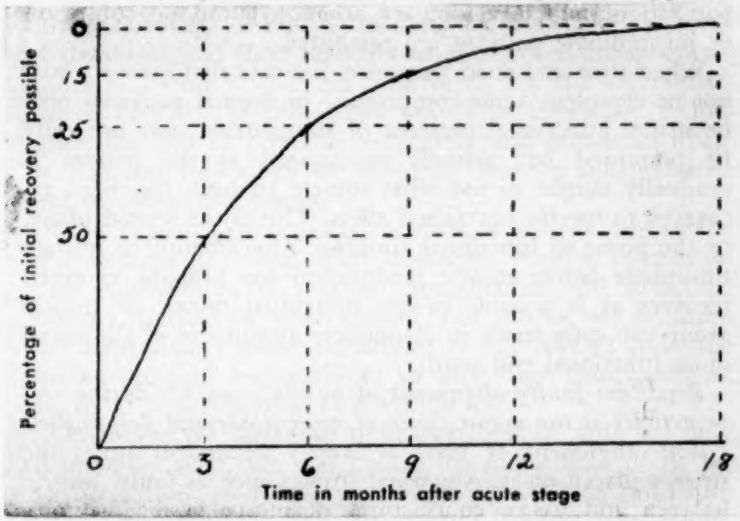
Poliomyelitis is capable of producing changes not only in muscle strength and coordination, but also in supportive tendinous, ligamentous, and fascial tissues. These changes usually result in loss of joint mobility through contractures, but may cause loss of stability through relaxation.

Tight tendinous structures may produce marked limitation of muscular strength and faulty bodily mechanics. Likewise, relaxation of these structures can cause deformity and incomplete return of muscular function. The physician must be able to recognize not only strength and weakness but also tightness and relaxation so that he can balance one against the other to encourage return of functional strength in intact muscle tissue and, at the same time, not endanger stability by stretching structures that have little chance of recovering necessary muscular support.

A fairly constant relationship exists between the time that has elapsed since the acute onset and the extent of recovery

of muscle function that is possible. The gross expectancy in any period of time is indicated in the chart.

Proper appreciation of this time and recovery relationship makes it possible to continue treatment as long as there is significant hope of further recovery and to avoid wasting time and money in the vain hope of recovery beyond a reasonable expectancy. For example, if a muscle group is rated "poor minus" or 10% of normal strength at the end of six months of adequate treatment, this score represents approxi-



mately 75% of the expected return. The additional 25% recovery possible through treatment over an indefinite period of time would not appreciably change the functional rating of the muscle and would only bring up the percentage to 12½% of normal. This gain would be insufficient to justify intensive treatment beyond the period when no statistical hope of real function remains.

On the other hand, if the muscle group is rated "fair" or 50% of normal at the end of six months, a period of treatment for a year or even longer would be well worth while if, at the end of that time, the additional 25% of recovery expected would bring the muscle up to a "fair plus" or even "good minus" grading.

The chart refers to the recovery of individual muscle

power through muscle reeducation and does not reflect the possibilities of gain in independence through specific functional training. The chart has its greatest value in the analysis of muscle grades under the 50% or functional level.

The period of recovery is divided into two fairly distinct phases. The first phase consists of individual muscle reeducation based on the assumption that, with time and good treatment, sufficient strength and coordination will return to permit normal activities. During this phase, only normal patterns of muscle action are attempted and no substitute or incoordinate patterns are permitted.

When time and good treatment indicate that recovery will not be complete, some compromise in normal activities may be made. Functional patterns of substitution may not only be permitted but actually encouraged as the patient is gradually taught to use what muscle strength has been recovered to specific functional effect. This is the second phase, or the phase of functional training. Any attempt to initiate this phase before muscle reeducation has brought as much recovery as is possible in the individual muscle or muscle group can only result in incomplete attainment of the maximum functional end result.

Persistent faulty alignment of bodily segments during rest or activity is the major cause of musculoskeletal deformities. The alignment of bone is largely dependent upon the stresses placed on it. Abnormal stresses such as faulty muscle balance and usage, contractures of muscular, ligamentous, and fascial tissues, lack of skeletal support or improper support, overweight, overactivity, and so on, must be recognized and controlled early if deformities are to be prevented or kept at a minimum.

Anyone with but little medical experience and training can recognize far advanced deformities. However, once this point is reached, little can be done beyond radical orthopedic surgery. The physician who cares for the patient with poliomyelitis must, therefore, be prepared to recognize these factors before they bring about irreversible changes and to follow through with a program of care designed to control the stresses before the deformity progresses so far that it cannot be kept at a minimum by conservative care and properly timed surgery.

Apparatus is frequently a necessary part of convalescent as well as of chronic care. Splints, corsets, crutches, braces, and so forth, may be essential, not only in the support of weakened bodily segments and in the prevention or correction of musculoskeletal deformities but also in muscle re-education.

The physician must, therefore, be able to recognize the need for such apparatus and to write an accurate prescription for the brace-maker. Much of the present feeling against the use of apparatus in the convalescent stage is based on an inadequate knowledge of bracing methods by physicians in charge of treatment and their inability to obtain well-fitting splints and braces from near-by manufacturers. For the severely involved patient, the physician's failure to appreciate proper apparatus and to prescribe accurately and obtain such apparatus may well mean the difference between independence and complete helplessness.

Most patients, particularly children, require a long period of treatment at home. This treatment usually consists of some combination of specific strengthening and stretching routines, limited physical activity, and proper use of necessary apparatus. Unless the patient or his parents have the intelligence and responsibility to carry out basic routines, the value of professional care will be lost.

Obviously, the physician in charge must be able not only to prescribe such care and realize the importance of its being carried out over long periods of time but he must also be able to determine that the therapy is being carried out. If it is evident that the child can never receive adequate treatment at home and his disability is such that treatment is necessary, some radical compromise must be made in bracing and possibly early surgery to obtain some part of the expected result. If the parents and the patient are irresponsible there is little advisability of long hospital care when its value will only be dissipated by negligent and haphazard treatment at home.

The physician must recognize the value of properly timed orthopedic surgery in the overall program. Surgical procedures designed to release persistent contractures or remove the deforming pull of muscle imbalance may be necessary in the convalescent stage not only to restore bodily alignment and

avert severely handicapping structural changes but also to allow the most effective use of muscle reeducation and functional training. Obviously, then, the physician must know the indications for these procedures and must not temporize with conservative routines when more radical procedures are necessary.

All patients with longstanding and apparently hopeless residual handicap deserve periodic evaluation. The field of physical medicine and rehabilitation is constantly developing routines and apparatus that may bring about startling functional improvement in patients formerly considered beyond further help. It is difficult to imagine a condition so chronic that the patient cannot be helped by thoughtful evaluation and specific treatment.

Adductor Longus Syndrome

JANET TRAVELL, M.D.*

SPASM and tenderness of the adductor longus muscle may cause persistent pain in the groin and leg. Relief may be obtained by anesthesia of the most sensitive areas, finds Janet Travell, M.D., of Cornell University, New York City.

In some cases the syndrome is a physiologic disorder of myofascial tissues, in others, a reflex cycle set up by remote lesions. Pain referred from the upper half of the muscle is felt deep in the groin. Sensations from the lower part radiate over the anteromedial aspect of thigh and knee, and at times over the pretibial region to the ankle.

Ethyl chloride spray is applied lightly over the muscle and groin in rhythmic upward sweeps, with avoidance of extreme chilling. During treatment the muscle is gently stretched. If tension does not relax immediately, the trigger zone should be infiltrated with 0.5% procaine hydrochloride in physiologic saline solution.

Symptoms due to direct muscle injury are permanently abolished by anesthesia. If spasm arises from a distant lesion, such as carcinoma of the lumbar spine or osteoarthritis of the hip, remissions are temporary, as a rule. Some patients apply the spray at home with good effect.

* The adductor longus syndrome: a cause of groin pain; its treatment by local block of trigger areas (procaine infiltration and ethyl chloride spray). Bull. New York Acad. Med. 26:284-285, 1950.

Treatment of Venous Thrombosis

F. Richard Pierce, M.D., and Trento J. Domenici, M.D.*
Henry Heywood Memorial Hospital, Gardner, Mass.

Modern management of venous thrombosis consists of anticoagulants, surgical interruption, or both (see table).

Prevention of pulmonary embolism lies in the early recognition of a venous thrombus. Phlebothrombosis, which has a dangerous propensity for embolization, must be differentiated from thrombophlebitis, with the more adherent clot.

Although both conditions may coexist, thrombophlebitis is an acute inflammatory process with heat, swelling, tenderness, and a fixed clot. Phlebothrombosis is noninflammatory, produces slight fever, tachycardia, tachypnea, minimal calf tenderness, and ankle edema and is often suspected only after pulmonary infarction has occurred.

In the experience of F. Richard Pierce, M.D., and Trento J. Domenici, M.D., early ambulation of the postoperative patient has not appreciably decreased the incidence of venous thrombosis. The condition, furthermore, is commoner in medical than in postoperative patients.

The use of anticoagulants is directed against the basic lesion throughout the vascular tree, rather than only the venous system of the legs. This method also lessens the possibility of postphlebitis or postthrombotic sequelae.

Numerous conditions, however, mitigate against the use of anticoagulant drugs, while no contraindication to venous interruption is recognized. Dicumarol, one of the most common anticoagulants used, requires facilities for daily determination of prothrombin time.

By whatever method employed, an effective level exists when the patient's prothrombin time is twice that of the control. For immediate anticoagulant effect, heparin is given intravenously in a continuous 250- to 500-cc. saline infusion with a total dose equivalent to 50 to 100 mg. of the drug every four hours. After the prothrombin time is determined, dicumarol is started at an average dose of 300 mg. the first day, 200 the second, and 100 the third. After this, heparin can usually be discontinued and prothrombin kept between 45 and 60% by dicumarol.

The antidote for excessive heparinization is intravenous 1% protamine sulfate in 50- to 100-mg. doses. Excessive dicumarol effect is best combatted by vitamin K in doses of 68 mg. intravenously every four hours and fresh whole blood transfusions. Anticoagulant therapy should be maintained as long as the patient's symptoms suggest continued activity of the basic process.

Dicumarol used ante partum may

* Problems and practices in a community hospital: treatment of venous thrombosis. New England J. Med. 242:395-402, 1950.

produce hemorrhage in the newborn but is beneficial in treatment and prophylaxis of postpartum venous thrombosis.

Venous interruption is the treatment of thrombosis when insufficient laboratory facilities preclude the use of dicumarol.

An adequate femoral vein interruption implies opening and exploring the vein. The danger of loosening a fatal embolism is slight, and removal of the clot protects against recanalization or future embolization.

The operation is performed bilaterally, since the apparently unaffected leg often harbors the thrombus. The superficial femoral vein is interrupted unless the clot extends into the common femoral vein, whereupon the latter vessel is explored and the clot aspirated. Surgical obstruction of the common femoral vein or of the inferior vena cava is to be avoided if possible, since impaired collateral circulation and serious disabling sequelae may result. Sympathetic block, Priscol, and papaverine may be used to relieve reflex vasospasm.

INDICATIONS FOR PROCEDURES WITH VENOUS THROMBOSIS

	ANTICOAGULANT TREATMENT	VENOUS INTERRUPTION
PROPHYLACTIC INDICATIONS*		
Medical		
Myocardial infarction	Indicated	Not used
Prolonged bed rest with history of venous thrombosis	Indicated	Not used
Surgical		
Elderly patients with:		
Major amputations or severe trauma to lower extremities	Not used	Indicated
Extensive gastrointestinal surgery	Not used	Indicated
Stage operations	Not used	Indicated
THERAPEUTIC INDICATIONS*		
Medical		
Prolonged enforced bed rest with development of signs or complications of venous thrombosis (congestive heart failure, pneumonia, prolonged infections)	Indicated	Not used
Obstetric		
Venous thrombosis or its complications in:		
Antepartum cases	Contraindicated	Indicated
Postpartum cases	Indicated	
Surgical		
Phlebothrombosis with slight to moderate or no pulmonary involvement	Indicated	Not used
Phlebothrombosis with massive pulmonary infarction	Indicated†	Indicated†
Thrombophlebitis (to guard against phlebothrombosis in opposite leg)	Indicated	Not used
Venous thrombosis with:		
Impaired liver or kidney function	Contraindicated	Indicated
Blood dyscrasia	Contraindicated	Indicated
Surgery in which hemorrhage or oozing may be postoperative factor	Contraindicated	Indicated
Active bleeding from any source (peptic ulcer, uterine tumor)	Contraindicated	Indicated
Failure of response to anticoagulants		Indicated
Neurologic disease or injury to central nervous system	Contraindicated	Indicated
Prolonged use of anticoagulants, making them expensive or impracticable	Contraindicated	Indicated
Prolonged use of acetylsalicylic acid	Contraindicated	Indicated
Patients with pulmonary infarction		
When heparin is not immediately available	Contraindicated	Indicated
With repeated emboli in spite of anticoagulants		Indicated

* If laboratory facilities are inadequate, patients with venous thrombosis or its complications should have venous interruption.

† Veins interrupted as emergency measure with simultaneous administration of anticoagulants.

Current Histamine Therapy

LESTER S. BLUMENTHAL, M.D.*
George Washington University, Washington, D.C.

In proper dosage, histamine is a safe drug and is of definite benefit in Ménière's syndrome, histaminic cephalalgia, selected cases of migraine headache, nonspecific photophobia, and acute and chronic urticaria.

Lester S. Blumenthal, M.D., has administered histamine with no untoward effects to patients with peptic ulcer, bronchial asthma, or other conditions for which the drug has ordinarily been considered hazardous.

The antihistaminic drugs, by blocking specific histamine effects, actively interfere with and modify typical allergic and anaphylactic processes. In the allergic reaction, histamine is probably not the primary factor involved, but is the chemical released secondary to some disruptive process within the cell. Therapeutic applications of the drug are based on the assumption that some fundamental sensitivity exists that can be neutralized by desensitization.

Histaminic cephalalgia—Horton's headache seems related to histamine since [1] a subcutaneous injection of histamine base usually precipitates an attack within thirty minutes and [2] attacks generally cease when gradually increasing subcutaneous doses of histamine are given twice daily for ten to thirty days.

Histamine may be given subcutaneously or intravenously. About a fifth of patients require no further treatment after a course of intravenous therapy. For the others, however, desensitization must be completed subcutaneously.

For subcutaneous dosage histamine diphosphate, 0.275 mg., equivalent to 0.1 mg. of histamine base, is available in 1-cc. ampules. At the first injection, 0.25 cc. is given, and subsequent doses are each increased by 0.05 cc. until the patient is receiving 1 cc. as the sixteenth injection.

If subjective or objective effects are noted, the next dose is cut in half. Eventually the amount is found that invariably produces symptoms. This represents the tolerance dose. More than 1 cc. should not be given to any patient.

The foregoing desensitization regimen usually improves or alleviates symptoms but, for prophylactic purposes, the frequency of injections should be gradually decreased. Eventually further treatment is unnecessary or the patient may require a tolerance dose at regular intervals, such as once every one or two weeks. If symptoms recur after a year or two, the original regime may be repeated.

For intravenous dosage a specially prepared solution is used, each 100 cc. of which contains 0.55 mg. of

* Current histamine therapy. M. Ann. District of Columbia 19:191-198, 1950.

histamine diphosphate and 0.9 gm. of sodium chloride.

Because of the potential effect on gastric acidity, treatments are administered immediately after eating and antacid tablets are chewed continuously during the injection. The procedure lasts an hour and may be done at the office.

The solution must not be run in too rapidly. Each injection is started at 5 to 10 drops per minute and the rate is gradually increased until a slightly flushed or full sensation in the head is barely perceptible After several treatments, 40 to 60 drops per minute is satisfactorily tolerated. The injections are given daily for four days, then every other day.

As soon as definite improvement is noted, the subcutaneous route may be substituted, and the patient administers the drug to himself at home.

For 20 patients with histaminic cephalalgia, the intravenous route was employed and in most cases great relief was obtained within several days.

Ménière's disease—Intravenous histamine is effective for acute attacks of Ménière's disease.

To avoid introduction of the sodium ion and because potassium chloride often causes severe burning sensations along the vein, a 5% solution of dextrose in distilled water is used as the vehicle; 1 ampule of histamine diphosphate, 2.75 mg. per cubic centimeter, is diluted in 500 cc. of the dextrose solution. The speed of injection is gradually increased until the skin flushes, usually at the rate of 50 to 60 drops per minute.

A one-hour treatment is given daily until headaches are relieved, ordinarily in three days, after which subcutaneous injections are employed prophylactically.

Therapy of the acute attack is more satisfactory than the prevention of recurrences.

Migraine headache—The principal use of histamine in treatment of migraine is to prevent or reduce the incidence of headaches.

Cases in which benefit may be expected are those with a unilateral, periodic, throbbing, vascular type of headache, associated with two or more of the following: [1] gastrointestinal dysfunction, [2] prodromes of scotomas or other cerebral disturbance, [3] hemicrania among at least two other members of the family, [4] duration of the usual attack for thirty-six hours or more if no medication is given, and [5] complete freedom from pain at intervals.

With one-hour intravenous injections given every other day for one to two months, followed by intravenous injections at intervals of seven to ten days or subcutaneous therapy, approximately 300 patients had 75% improvement.

Photophobia—Since an abnormal intolerance to light is often associated with migraine, 3 patients with photophobia were treated with intravenous and subcutaneous histamine. Results were excellent.

Posttraumatic syndrome—Vasodilating headache is a frequent complication of the posttraumatic cerebral syndrome. Daily intravenous histamine for about two weeks brought definite early relief of symptoms to 3 of 5 patients and more gradual

but progressive improvement in the other 2.

Acute and chronic urticaria—For 5 patients with acute postmedication urticaria who had not benefited from previous treatment with epinephrine, calcium, or antihistamine, complete recovery within twenty-four hours of the last injection was achieved with histamine. Intravenous administration of 30 mg. of Benadryl was followed by rapid injection of 500 cc. of dextrose solution containing 1 mg. of histamine base daily for three days.

Of 9 patients with chronic urticaria treated by combined intravenous and subcutaneous histamine, all showed definite improvement although results were not as striking or as rapid as in the acute cases.

Miscellaneous conditions—Daily intravenous histamine injections were given to 4 patients with sudden nerve deafness presumably resulting from edema of the cochlear portion of the labyrinth. Best results were attained in the most recent cases.

Considerable benefit for symptoms of obliterative peripheral vascular disease followed biweekly infusions of histamine into the femoral artery.

Coagulation time is shortened as a result of increased platelet activity in patients receiving intravenous injections of histamine. For 5 patients with active hemophilia given intravenous histamine, cessation of bleeding, an increase in well-being, and a decrease in coagulation time were noted.

Intravenous histamine therapy appears to be of value in the treatment of temporal arteritis.

LABIAL DIPHTHERIA may develop alone or with lesions in other sites. During a widespread epidemic in a Japanese prison camp on Singapore Island, 46 British prisoners had typical membranes on the lips, particularly at corners of the mouth. Riboflavin deficiency with cheilosis and fissure was the predisposing factor, says George S. Riddell, M.D., of the Aberdeenshire County Council, England. Simultaneous nasal, faucial, or cutaneous infection appeared in only 22 instances.

Brit. M. J. 4657:818-819, 1950.

AEROBIC FECAL BACTERIA appear to be reduced only temporarily, and anaerobic organisms not at all, by sulfonamide therapy. In 1 case of chronic ulcerative colitis reported by Homer C. Marshall, Jr., M.D., Joseph B. Kirsner, M.D., and Walter L. Palmer, M.D., of the University of Chicago, the flora changed from predominantly gram negative to predominantly gram positive while ulceration of the bowel persisted, and returned to gram negative by the time the condition had healed. Only 2 of 5 patients showed clinical improvement during treatment.

Gastroenterology 14:418-424, 1950.

DIAGNOSIS OF ADDISON'S DISEASE may be confirmed by adding a few drops of Millon's reagent to serial dilutions of urine. If the color changes to pink, Addison's disease is indicated. When reactions are equivocal, the test is repeated with urine obtained after ingestion of 4 gm. of tyrosine. C. Ferrero, M.D., of Geneva University, Switzerland, found reactions positive in each of 13 cases of Addison's disease and in 9 of 12 cases of hypopituitarism with secondary adrenal insufficiency. In 13 other endocrine disorders, the reaction was positive only in hypothyroidism. A negative reaction is obtained when desoxycorticosterone acetate or adrenal extract is being given, and return of a positive reaction during treatment indicates insufficient medication.

Schweiz. med. Wchnschr. 80:179, 1950.

LIVER EXTRACT INJECTIONS are sometimes discontinued because of intolerance. However, desensitization may be achieved by a series of progressively larger injections, administered by the patient or a member of his family at home. Sensitivity reaction usually consists of flushing, nausea, hives, or other allergic symptoms. Oral liver therapy may be tried but frequently is incapable of preventing pernicious anemia relapse. Changing the animal source of the liver extract usually is of no benefit. Beginning with 0.05 cc. liver extract, the dose is increased daily by 0.05 cc. until 0.6 or 0.8 cc. can be given at one time. Jerome E. Cook, M.D., of Washington University, St. Louis, then instructs the patient to take a small injection of liver extract every two or three days; the exact dosage depends upon the patient's hematologic needs. Once the patient has become desensitized, liver extract injections must be given at frequent intervals, such as every other day, or reactions may recur.

Ann. Int. Med. 32:506-509, 1950.

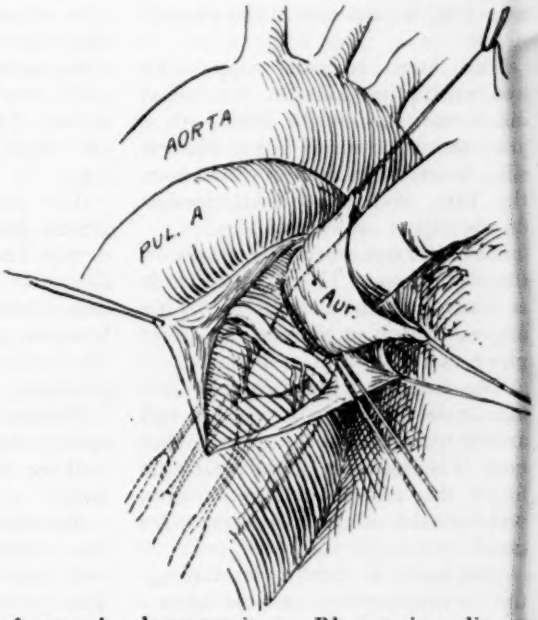
ABSOLUTE LYMPHOCYTOPENIA within forty-eight hours of onset of the disease supports a diagnosis of acute pancreatic necrosis. A later rise in the number of lymphocytes allows a good prognosis. A diagnosis of acute necrosis was made in 38 cases by K. Herfort, M.D., and V. Letosnik, M.D., of Charles University, Prague. All the patients had lymphocytopenia; the number of lymphocytes in the peripheral blood decreased to from 2 to 10% of the total white count, which remained normal or increased only slightly. In 31 cases, diagnosis was confirmed by operation or necropsy. The lymphocyte values of patients showing improvement returned to normal levels.

Casop. lék. cesk. 88:1006-1009, 1949.

Commissurotomy for Mitral Stenosis

ROBERT P. GLOVER, M.D., THOMAS J. E. O'NEILL, M.D., AND CHARLES P. BAILEY, M.D.*

University of Pennsylvania, and Hahnemann Medical College, Philadelphia



CONSIDERABLE function may be restored to a stenotic mitral valve by separating the leaflets along the fused border.

The surgeon's forefinger is inserted through the auricular appendage, and a hooked knife is slipped down the finger and manipulated by the sense of touch. For unusually hardened tissue, Robert P. Glover, M.D., Thomas J. E. O'Neill, M.D., and Charles P. Bailey, M.D., use a specially designed punch with trocar and cannula.

Pressure in the left auricle is immediately reduced without increase of regurgitation. Invalids are often able to give up digitalis and return to former occupations. Of 30 persons undergoing the procedure, 21 were greatly benefited and 3 improved subjectively. Half of the 6 deaths occurred before surgical technic was perfected.

Commissurotomy is done only in carefully chosen cases. Recovery is most likely if the mitral defect produces extreme fatigability, exertional dyspnea, and definite pulmonary hypertension. Rheumatic disease should be quiescent, the valve primarily stenotic, with little incompetence, and sinus rhythm normal. The left ventricle should not be appreciably enlarged.

Prospects are less encouraging for patients with recurrent blood stains in sputum, arterial emboli, or auricular fibrillation without heart failure.

Operation is contraindicated by rheumatic infection, subacute bac-

* Commissurotomy for mitral stenosis. Circulation 1:329-342, 1950.

terial endocarditis, mitral regurgitation, aortic valve deformity, or heart failure beyond medical control.

The heart is approached through the left anterior chest wall with the patient in dorsal recumbent position. The pericardium is incised longitudinally on the left lateral aspect, ½ in. anterior to the phrenic nerve.

The huge auricular appendage now protruding from the pericardial sac is encircled at the base with a purse-string suture of heavy braided silk. A Satinsky clamp is closed over the base, and a generous portion of the tip is amputated.

The operator wears two gloves on the right hand. The hooked blade is inserted at the base of the index finger through a slit in the outer glove and projected at the tip.

The finger is slipped into the left auricle as the clamp is released and as the purse-string suture is pulled taut. The valve is found with the finger tip, and size of the opening and location of the commissures are noted.

The knife is then thrust through the valvular orifice, and the anterolateral commissure is divided with a backward stroke of the hook. The finger again palpates and gently dilates the opening, and if the cut does not extend well into healthy tissue, the knife stroke is then repeated.

When the valve is rigid and fixed the incision may be widened. The hand is pronated to divide the medial commissure.

As the finger and knife are withdrawn from the auricle, the purse-string suture is drawn tight, so that only a few cubic centimeters of blood is lost. The suture is tied and the cut edge of the appendage oversewn.

The backward-cutting punch designed for very hard valves has a narrow blade and long bite. The incision can be extended through diseased tissue into the flexible membranous valve as with the hook, but has not the advantage of finger guidance.

Postoperative pain is reduced by opiates for three or four days, and walking is allowed in two to five days.

As shown by cardiac catheterization, reopening the mitral valve at once lowers pressure in the chambers. The systolic value in the left auricle may fall from 45.1 to 15.5 mm. of mercury and diastolic pressure from 30.3 to 2.6 mm.

RESPIRATORY BORBORYGMUS may be present with hiatus hernia and possibly with other conditions in which the stomach is partly in the thorax. The sounds are usually found approximately at the level of the diaphragm. Although gurgling sounds in this area are not uncommon, the borborygmi described by Henry J. Marriott, M.D., of University of Maryland, Baltimore, in hiatus hernia were rhythmic and synchronized with respiration. The sounds are intensified when the patient is in a sitting position.

Bull. School Med. Univ. Maryland 35:13-15, 1950.

Thymectomy for Myasthenia Gravis

HENRY R. VIETS, M.D.*
Harvard University, Boston

RESULTS of thymectomy in the last nine years justify use of the operation for treatment in about half the cases of myasthenia gravis. If patients are carefully selected and adequately maintained with neostigmine during the procedure, operative mortality should be negligible.

Thymectomy should be performed only when the patient is steadily and fully maintained and well balanced by neostigmine because of the hazard of remissions and relapses. Operations should never be done hastily.

Thymectomy is not the best therapy for patients with few symptoms, those well benefited by neostigmine regardless of the dosage, most persons over forty years of age, or for patients with wide swings of remission and relapse. Less than half of 300 patients seen since 1935 by Henry R. Viets, M.D., have been considered proper candidates for thymectomy.

Since 1941, of 36 myasthenic patients subjected to thymectomy, 7 had thymomas and 29 had various degrees of involution of the thymus with germinal centers in thymic tissue.

Results of the 25 survivals in cases without thymoma were classified as excellent to good, 10; fair to good, 4; poor to fair, 2; poor, 2; and too soon to estimate, 7.

The conditions of 2 of the 3 living thymoma patients are excellent, that of the third is fair; 2 of the 4 nonsurvivors were operative deaths, presumably from improper handling at operation. Neither patient had the advantage of a properly adjusted amount of intravenous neostigmine.

The appearance on a radiogram of a mass in the anterior mediastinum in a myasthenic patient indicates probable existence of a thymoma. Operation may or may not be advised, the decision being based on a careful study of the entire condition. Some thymomas become invasive but are usually considered benign neoplasms. Implantations may occur postoperatively.

Dosage should be fixed for a week or more before the operation. Each 15-mg. oral tablet of neostigmine bromide is the equivalent, in effect, of 0.5 mg. of neostigmine methylsulfate given intravenously. Thus, a patient taking 12 tablets in twenty-four hours requires 2 mg. of neostigmine methylsulfate intravenously in an equivalent eight hours. This may be added to 1,500 cc. of dextrose or saline and given intravenously just before, during, and after the operation.

Diminution of the severity of relapses and prolongation of duration of remissions following thymectomy

* Thymectomy in myasthenia gravis. Brit. M. J. 4646:139-147, 1950.

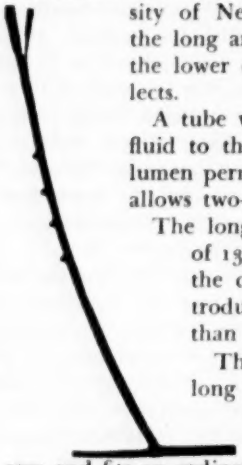
are often favorable effects of the operation. A patient's postoperative status is more stable than during the preoperative period.

Age, sex, duration of disease, length of previous treatment with neostigmine, roentgen-ray treatment, and condition of the thymus at operation are not correlated with the degree of improvement after thymectomy. Symptoms may improve immediately or after several months.

Improved Biliary T-Tube

R. Russell Best, M.D.*

A right-angle tube, though useful for routine postoperative or delayed cholangiographic studies, is not suitable for flushing out residual stones, finds R. Russell Best, M.D., of the University of Nebraska, Omaha. Solutions injected through the long arm often pass toward the liver and not into the lower end of the duct, where debris generally collects.



A tube with a wide angle and second lumen directs fluid to the desired site (see illustration). The double lumen permits escape of gas and fragmented debris and allows two-way irrigation.

The long arm of the modified tube forms an angle of 135° with the arm that enters the distal part of the common duct. The device is more easily introduced and occupies a better anatomic position than the usual model.

The double lumen of the tube runs down the long arm along the wide angle to the distal end of the transverse arm. The smaller of the two channels projects from the side of the long arm and fits an ordinary syringe tip.

When the T-tube is inserted, a heavy silk suture is passed through one of four rubber tabs, according to abdominal depth, and through the skin. The tube is thus firmly fastened, yet the lumen is not punctured. Adhesive tape may be added for security.

Antispasmodics and solutions to wash out or dissolve stones are introduced into the smaller opening by a syringe with blunt needle. Contrast media are injected through the large lumen, while the second passage is plugged or compressed.

* Choledochostomy—advantages of a modified T tube. Surg., Gynec. & Obst. 90:295-297, 1950.

Ulcerative Colitis

J. M. Rice-Oxley, B.M., and Sidney Truelove, M.D.*
Oxford University, England

In spite of great advances in other medical fields, ulcerative colitis remains dangerous and disabling. Treatment and prognosis vary with the stage of the disease.

Mortality is 22% in the first year and then declines, although 10% of cases may prove fatal in the next five years. During the fulminating state, even when medical measures are apparently failing, emergency ileostomy seems to do no good and may precipitate death, observe J. M. Rice-Oxley, B.M., and Sidney Truelove, M.D.

If the patient survives the first year of the disease, colitis usually recurs, sometimes after a long remission. At least half the patients are more or less incapacitated and, in such instances, ileostomy may be justified even in uncomplicated cases.

Estimates of probable outcome and of the value of specific remedies for ulcerative colitis are often unreliable because statistics are based on a heterogeneous group of patients admitted to the hospital in all phases of involvement. Moreover, investigators frequently fail to distinguish between acute and chronic disease.

To obtain a representative sample, 72 patients with ulcerative colitis were observed for one to eleven years, starting with the first attack. All subjects had been ill less than two years when first admitted to a general hospital.

Medical measures consist chiefly of rest in bed; replacement of blood, electrolytes, and protein by intravenous infusions; low-residue diets high in calories and proteins; and vitamin supplements.

Chemotherapy and antibiotics apparently do not change the course of ulcerative colitis. However, penicillin and sulfonamides have some value if used before and after operations and for prevention or treatment of pyogenic complications.

After the acute stage, the disease tends to become intermittent, with remissions of five years or more, but in some cases symptoms continue indefinitely.

A number of patients managed to lead practically normal lives regardless of diarrhea. About half are moderately incapacitated, with frequent admissions to the hospital, and a small proportion are totally disabled. Percentages in each group are about the same whether colitis is continuous or interrupted.

Since medical treatment is unsatisfactory and the relapse rate high, inconveniences of ileostomy should be carefully weighed against the discomforts and restrictions of chronic disease. Though generally considered only for a stricture, fecal fistula, or other complication, operation may be advisable in cases of several years' standing.

* Ulcerative colitis: course and prognosis. Lancet 258:665-666, 1950.

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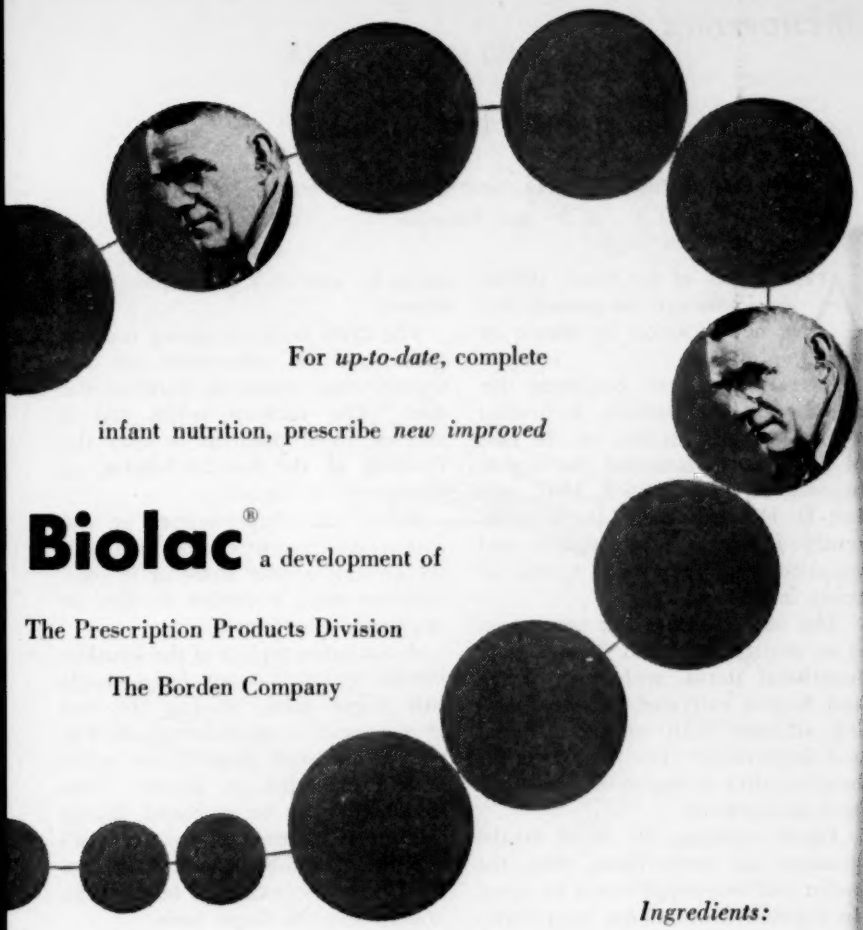

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Elastic Hand Splints

STERLING BUNNELL, M.D., AND LOT D. HOWARD, JR., M.D.*
San Francisco

After injury of the hand, stiffened joints can be coaxed into a new position by elastic or spring splints.

Several types are employed for exercise or mobilization, to restore a position of function, or, in case of paralysis, to complete the muscle balance. Sterling Bunnell, M.D., and Lot D. Howard, Jr., M.D., have recently invented new models and supplied attachments for splints already in use.

The object of the first adaptation is to change the hand from a nonfunctional status, with wrist flexed and fingers extended, to the grasping attitude, with wrist dorsiflexed and fingers bent. The basic knuckle-bender splint is employed with three new attachments.

Figure *a* shows the hand in the position of nonfunction, with the splint and two supplements in place. In Figure *b* the hand has been drawn into a position of function.

The first attachment is a flat padded segment hinged to the distal part of the splint to flex the middle finger joints. Both old and new sections are powered by rubber bands.

The second addition is an Oppenheimer type of splint, which slowly forces the wrist into dorsiflexion by the gentle elastic pressure of a spring. The two attachments are fastened to the original splint by wire rods thrust into metal sleeves.

The third device, a spring cock-up splint, can be substituted for the Oppenheimer splint to dorsiflex the wrist. The cock-up splint has a notched hand piece to fit over the crossbar of the knuckle-bender, as illustrated in Figure *c*.

Either the Oppenheimer or the cock-up attachment can be used with the knuckle-bender alone or in combination with a device to flex or straighten the fingers.

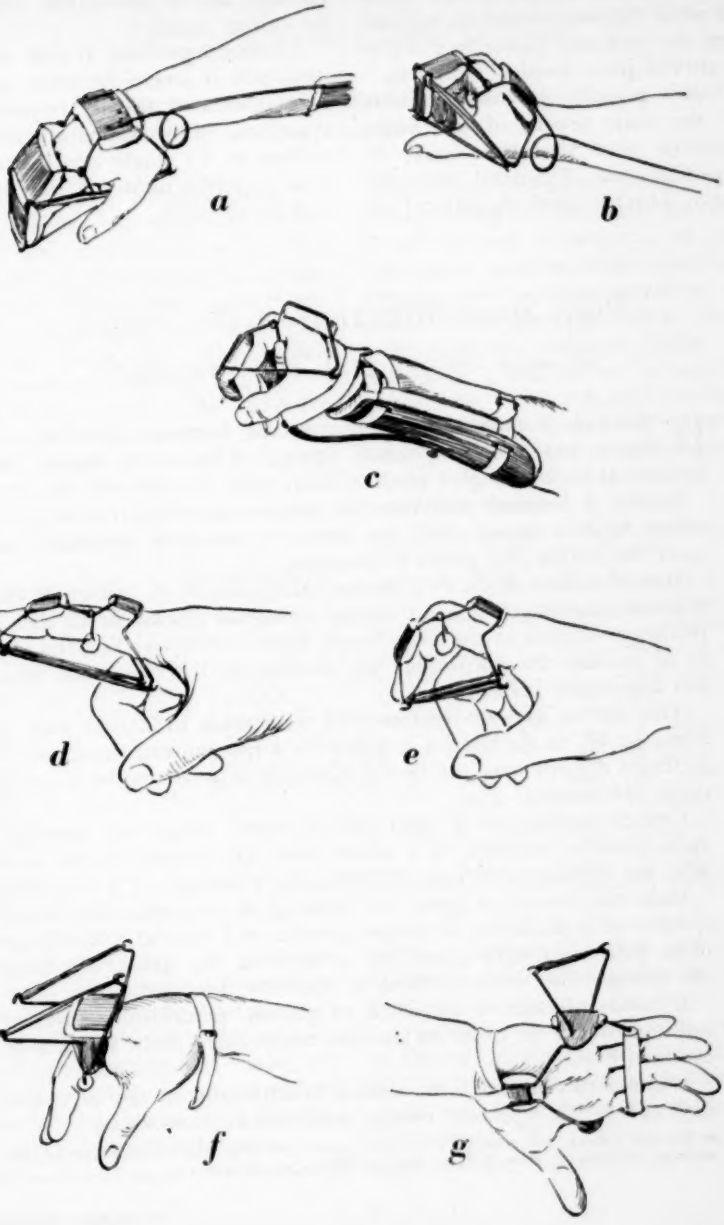
A miniature replica of the knuckle-bender splint is worn for a single stiff finger joint, leaving the rest of the hand unencumbered. In Figure *d* the finger wearing the splint is still extended, in Figure *e* the middle joint is being flexed. Elastic tension is maintained by druggist's light-weight rubber bands. The proximal wire extension is bent to accommodate the finger webs.

Still another splint draws out flexion contracture of the finger joints after ischemic fibrosis of hand muscles. The proximal segments alone are extended by a knuckle-bender in reverse. Figure *f* shows the deformed position with the splint in place; in Figure *g* the proximal finger joints have been pulled into extension by three-point elastic pressure.

A base plate is stabilized in the

* Additional elastic hand splints. J. Bone & Joint Surg. 32-A:226-228, 1950.

APPLICATION OF SPLINTS



palm by a web strap fastened about the wrist. Counterpressure is applied over the proximal joints by a slightly curved plate padded with felt.

Elastic pressure is brought to bear on the volar aspect of the finger segments near the distal ends by a padded base. Extended wire outriggers provide good mechanical advantage and a convenient support for rubber bands.

A difficult problem is thus solved, inasmuch as severe deformity of the type illustrated usually requires an operation. Splints applying elastic extension to the finger tips merely accent hyperextension of the middle and distal joints.

Pulp Space Infection of the Finger

HAROLD BOLTON, M.D. AND ASSOCIATES*

By the time a physician is consulted for fingertip infection, an abscess has almost certainly formed. The cavity should be drained at once through a small incision made directly over the site.

Lateral J incisions and bilateral linear cuts often traverse and infect healthy tissue, heal too fast for adequate drainage, or sever the nerves and produce causalgia.

Harold Bolton, M.D., P. J. Fowler, M.D., and R. P. Jepson, M.D., observed superficial or deep central or lateral abscess in all distal phalanges incised at the Manchester Royal Infirmary, England. In 39 of 50 cases the pulp alone was affected, in the remainder bone was apparently involved.

The site of greatest tension and tenderness is located with a blunt probe, or the abscess is found by a spontaneous sinus, which is always directly over the cavity. Bleeding is prevented by a pneumatic tourniquet.

General anesthesia is used and a small ellipse of cornified epithelium is removed. If a small sinus has formed in the true skin, the opening is excised elliptically for a distance of 4 or 5 mm.

Since the wound is open, no drainage is required. The cavity is filled with penicillin in lactose powder and covered with broad-mesh petroleum jelly gauze and a layer of dry gauze. Dressings are changed two or three times at three-day intervals.

If bone infection is suspected or proved, penicillin is injected intramuscularly in doses of 100,000 units twice daily for ten to fourteen days.

Without osteomyelitis, the wound usually heals in ten or twelve days and even a typist can resume work within three weeks.

* Natural history and treatment of pulp space infection and osteomyelitis of the terminal phalanx. J. Bone & Joint Surg. 31-B:499-504, 1949.

Frequency of Plural Births

METROPOLITAN LIFE INSURANCE COMPANY*
New York City

AGE and race influence the frequency of multiple births. The rate of such births rises with the increasing age of the mother to a peak between the ages thirty-five to thirty-nine and then falls gradually, finds the Metropolitan Life Insurance Company.

While this curve is the same for both white and nonwhite mothers, the incidence of plural births is greater at every age for nonwhite mothers. The statistical difference between the two groups also increases with the number of children born in a single confinement. Twins are 1¼ times as frequent for nonwhite as for white mothers, and quadruplets are 4½ times as frequent.

This high proportion of multiple births among the nonwhite races is almost entirely a reflection of the rate among Negroes. Other nonwhite groups have a lower incidence of plural births than the white race.

Statistics on multiple births of more than 4 children are, of course, nonexistent. Only two sets of quintuplets are known to have survived infancy—the Dionne quintuplets, born in Canada in 1934, and the Diligenti quintuplets, born in Argentina, 1943.

Quadruplets are born only once in 620,000 confinements. One set of triplets appears in every 9,400 births; twins are born once in every 92 confinements.

MULTIPLE BIRTHS IN UNITED STATES, 1934-47

Age and Color of Mother	*Number of Confinements*	*Multiple Births per Million Confinements*			
		Total	Twins	Triplets	Quadruplets
Total, all ages	35,985,990	10,997	10,889	106	1.6
Under 20	4,276,546	6,178	6,137	41	†
20-24	11,294,105	8,600	8,531	68	1.1
25-29	9,862,737	11,342	11,240	101	1.2
30-34	6,234,130	14,366	14,207	157	2.2
35-39	3,278,517	17,247	17,015	228	4.6
40-44	956,597	14,085	13,916	166	3.1
45 and over	83,358	8,757	8,661	84	†
White, all ages	31,624,779	10,688	10,589	98	1.1
Nonwhite, all ages	4,361,211	13,236	13,062	169	5.0

† Cases too few to warrant computation.

* The frequency of plural births. Statist. Bull. Metrop. Life Insur. Co. 31:6-7, 1950.

Parenteral Fluid Therapy for Children

ALBERT M. HAND, M.D., AND C. R. LEININGER, M.D.*
Children's Memorial Hospital, Chicago

SERIOUS derangement of water and electrolyte balance frequently accompanies children's diseases.

Acute diarrhea, diabetic acidosis, pyloric stenosis, severe burns, and other conditions require parenteral replacement of water and some electrolytes. Successful therapy entails a knowledge of the type and approximate amount of electrolytes lost, explain Albert M. Hand, M.D., and C. R. Leininger, M.D.

In addition, the regular daily requirements of the child must be met (Table 1). Finally, the composition of the solutions employed in fluid therapy should be known (Table 2).

Serum electrolyte concentrations are best expressed in milliequivalents, mEq. per liter. Other terms, such as milligrams or volumes per cent, are chemically unrelated and therefore misleading. Milliequivalents are calculated by dividing the weight of the dissolved electrolyte, in milligrams per liter, by the atomic weight and multiplying by the valence.

For example, physiologic saline solution contains 0.9 gm. of sodium chloride per 100 cc. In 1 liter is 9 gm., or 9,000 mg., of sodium chloride. The atomic weight of sodium is 23; of chloride, 35.4. The valence of sodium and chloride is 1. Therefore $(9{,}000 \div 58.4) \times 1 = 154$ mEq. of sodium *and* chloride per liter.

TABLE 1. BASIC DAILY REQUIREMENTS

Age	Weight kg.	Water cc./kg.	NaCl gm.	Protein gm./kg.	Calories/kg.
<1 yr.	2–10	150	0.5–1	1.5	60
1–2 yr.	10–13	120	1.5	1.0	55
4 yr.	15–20	80	2	1.0	40
10 yr.	30–40	50	3–4	0.6	30
>10 yr.	30+	45–30	6	0.6	25

Fluids are best given intravenously or subcutaneously with hyaluronidase to facilitate absorption. Hypertonic solutions and amigen should be administered only intravenously.

If blood is given, the rate is regulated to 10 to 20 drops per minute or 30 to 60 cc. per hour. In a single infusion, 20 to 30 cc. of blood per kilogram of body weight is the most that should be given to a child.

The electrolyte pattern of the serum may be roughly calculated by knowing only the serum sodium-chloride and serum carbon-dioxide content. Serum carbon-dioxide expressed in volumes per cent may readily be converted to milliequiva-

* Parenteral fluid therapy in children. M. Clin. North America 34:53-70, 1950.

TABLE 2. EQUIVALENTS OF REPLACEMENT SOLUTIONS

100 cc. of ↓	→ are equivalent to		
	NaCl gm.	Protein gm.	Calories
Physiologic saline	0.9		
Plasma or serum	0.45	5	20
Whole blood	0.45	6	24
5% amigen with 5% dextrose in distilled water	0.20	4	36
5% dextrose in distilled water			20
5% dextrose in physiologic saline	0.9		20
10% dextrose in distilled water			40

lents per liter by dividing by the factor 2.2.

The normal serum carbon dioxide is 27 mEq. per liter, 60 volumes per cent ÷ 2.2. An infant weighing 10 kg. has approximately 7 liters of fluid, since 70% of the body weight is fluid. If acidosis is present with a serum carbon dioxide of 14 mEq. per liter, an alkali deficit exists of (27−14) 13 x 7=91 mEq.

To correct this deficit, 91 cc. of one molar sodium lactate is required since each cubic centimeter of a univalent molar solution contains 1 mEq. This must be given as the isotonic one-sixth molar sodium lactate solution, so (91 x 6) 546 cc. is required.

Roughly, 4.2 cc. of one-sixth molar sodium lactate solution per kilogram of body weight will raise the serum carbon dioxide 1 mEq. Probably only one-half of a calculated deficit should be replaced at one time.

Acute diarrhea causes a loss of water and base, principally sodium. Potassium, calcium, and magnesium are also lost. Metabolic acidosis results. The urine is acid in reaction, the blood *p*H lowered, and Kussmaul breathing will begin if the serum carbon-dioxide content is 15 mEq. per liter or less.

Therapy is aimed at replacing base and fluid. Hypotonic saline and one-sixth molar sodium lactate solution may be used. During recovery, calcium may be required.

Diabetic acidosis is another example of metabolic acidosis. Therapy should start with an intravenous infusion of 2 parts normal saline and 1 part one-sixth molar sodium lactate solution. The fluid deficit of a child in diabetic coma is usually equal to 5 to 10% of the body weight. This deficit should be replaced within the first twenty-four hours in addition to the normal daily fluid requirement. Initially, 1 unit of crystalline insulin per kilogram of body weight is given intravenously and the same amount subcutaneously.

Pyloric stenosis with vomiting causes metabolic alkalosis. The urine is alkaline, the blood *p*H elevated, and respirations slow or apneic. Acidification is indicated.

One-sixth molar ammonium chloride solution can be employed. For mild alkalosis, 15 cc. of one-sixth molar ammonium chloride is given in physiologic saline per kilogram of body weight. An additional 15 cc. of physiologic saline per kilogram is administered.

Perforation of the Esophagus

JOHN D. KERNAN, M.D.*
Presbyterian Hospital, New York City

A GRAVE surgical emergency is presented by perforation of the muscular and fibrous layers of the esophagus.

Leakage into the mediastinum results in periesophageal cellulitis with rapid spread of infection through the surrounding loose connective tissue. Until the advent of chemotherapy, antibiotics, and modern chest surgery, the condition was almost invariably fatal.

Symptoms given by John D. Kernan, M.D., are:

1] Pain and difficulty in swallowing

2] Exquisite tenderness in the lower part of the neck associated with crepitus

3] Rapid increase in area and severity of these signs with continuous pain not relieved by sedation in chest, back, or abdomen and, sometimes, hematemesis and nausea

4] Effusion in the posterior mediastinum with possible collapse of one or both lungs, seen on roentgenograms as widening of the mediastinal area and compression of the lungs.

5] Board-like rigidity of the abdomen

Perforation may result from internal or external trauma, disease, or congenital defect or, rarely, may be spontaneous.

The most frequent cause is internal trauma by endoscopic procedures for removal of foreign bodies, biopsy, or dilatation of strictures.

Removal of impacted foreign bodies is never a wholly safe procedure. Prompt hospitalization and careful roentgenographic diagnosis are essential. Intratracheal general anesthesia is necessary for adequate relaxation. Endoscopic examination should be done only by an experienced operator, and with gentleness.

Rough, sharp objects such as splinters of chicken or fish bone and open safety pins should first be located by a biplane fluoroscope and then removed with the appropriate tube and forceps. Coins and similar objects may be retained without harm for some time, unless they block the lumen of the esophagus so as to lead to aspiration of food and resultant bronchopneumonia.

The ingestion of corrosives like lye may cause sloughing of the esophageal wall with secondary perforations. Once the immediate emergency is past, the lumen may be kept open by daily dilation for twelve to twenty-five weeks with a mercury-weighted bougie, which is left in place for thirty minutes each time, or by gastrostomy and retrograde bougienage over a string or filiform guide preferably with fluoroscopic observation.

* Perforation of the esophagus as a surgical emergency. S. Clin. North America 30:405-419. 1950.

Stricture after external trauma such as stab wounds is treated by dilation or secondary resection.

Perforation from chronic diseases, mainly cancer or tuberculosis, usually does not cause acute illness. The slow penetration of the esophageal wall is associated with formation of a protective zone of reaction.

Spontaneous rupture is rare, and results from gluttony, alcoholism, persistent vomiting of pregnancy or seasickness, epilepsy, or sudden pressure changes. Death is prevented only by prompt opening of the chest. The stomach contents are flushed out and the perforation closed by suture. The chest is then drained.

Diabetic Retinopathy

BRUCE L. KANTAR, M.D.*

THE earliest and most typical diabetic lesions in the retina are punctate red spots occurring with normal arterioles. These minute lesions, long considered hemorrhagic, are now known to be capillary aneurysms.

On reviewing 49 cases of diabetic retinopathy at the University of Minnesota Hospitals, Minneapolis, Bruce L. Kantar, M.D., noted microaneurysms in 48, with no other changes in 7. Fundi in the exceptional instance were obscured by dense retinitis proliferans. Subjects were twenty-two to seventy-eight years old and had been diabetic one to twenty-six years.

The punctate spots appear in the posterior pole of the eye, usually near the macula, and involve the venous end of the retinal capillary nets. Diameter varies from 30 to 90 microns and may be 15 times the width of the parent capillary.

Some aneurysms undergo thrombosis and are seen as round white nodules, others rupture and cause deep hemorrhages. The central retinal area may also contain small yellowish white exudates, single or clustered.

Larger retinal veins may become overfull and tortuous, with segments of pronounced dilatation and constriction, exudate along the walls, and extensive bleeding. In some cases, a network of new vessels arises in a brushlike mass supported by delicate connective tissue.

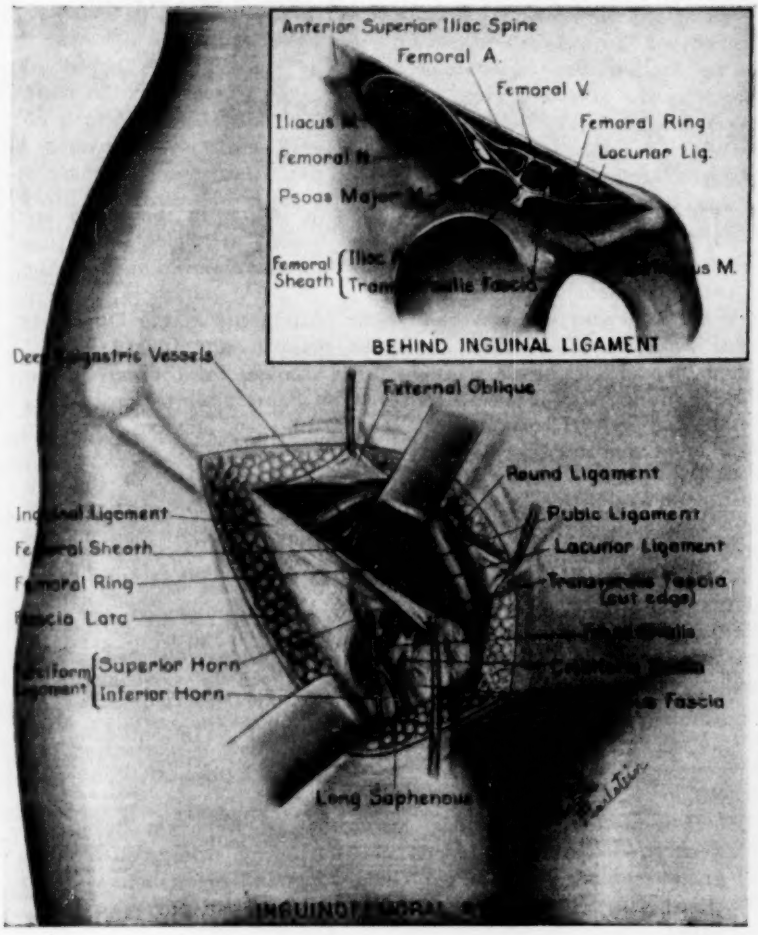
If hypertension develops, arteriosclerosis is shown by cotton-wool patches and focal arteriolar narrowing. Kimmelstiel-Wilson disease should be suspected when longstanding diabetes is associated with hypertension, renal insufficiency, and advanced retinopathy.

* Diabetic retinopathy. Bull. Univ. Minnesota Hosp. 21:352-360, 1950.

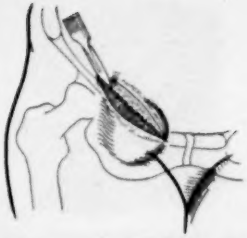
Femoral Hernia

F. M. AL AKL, M.D.
Kings County Hospital, New York

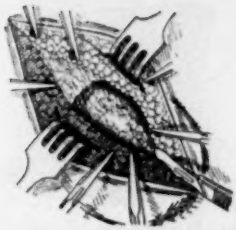
KEEP THIS PICTURE IN MIND



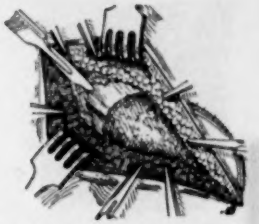
KEEP THIS PICTURE IN MIND



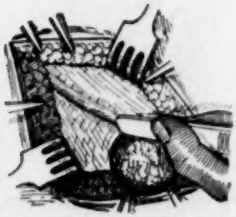
1. Incise skin obliquely outward beginning 1 cm. medial to pubic tubercle, then extend incision halfway to anterior superior iliac spine.



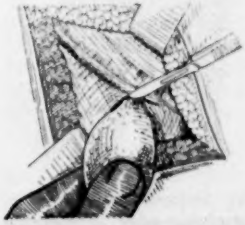
2. Part and lift skin with sharp retractors. Incise the fat and superficial fascia. Clamp branches of external pudic and superficial epigastric vessels.



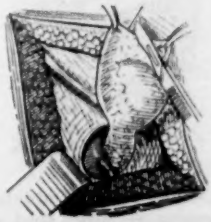
3. Open wound lateral to hernial mass and continue incision down to underlying inguinal ligament. Lift the lateral angle of wound.



4. Sweep fat and areolar tissue over inguinal ligament and around hernial protrusion. Isolate herniated mass and clear of adherent cribriform fascia. Clamp and cut branches of long saphenous vein.



5. Lift hernial mass and dissect neck free, exposing falciform ligament laterally, emerging saphenous vein caudad, and pectineous fascia medially. Tie bleeders.



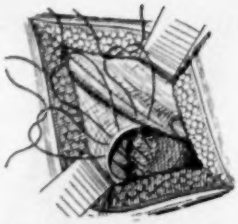
6. Clamp, then incise longitudinally outer covering of ballooned-out cribriform fascia and crural septum of transversalis fascia with intervening and underlying fat down to peritoneal sac.

7. Pick up peritoneum and cautiously incise between forceps. Clamp the edges.

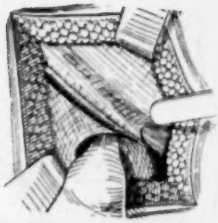
8. Enlarge opening, examine, then gently drag contents into sac to free and expose constricted portion at neck.

9. Reduce contents. Pull out on sac; transfix and tie neck flush.

10. Excise sac and push stump back beyond femoral ring into abdominal cavity.

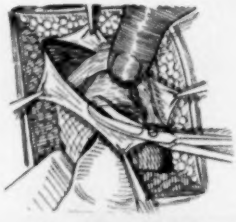


11. Doubly ligate and cut saphenous vein, then approximate falciform ligament to pectineous fascia and close skin.

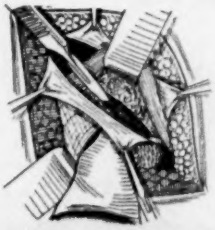


12. If hernial contents are not reducible, retract skin cephalad and expose external inguinal ring and adjoining external oblique aponeurosis.

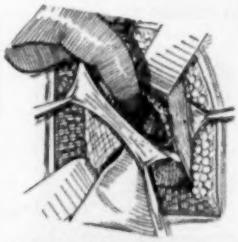
13. Split external oblique aponeurosis over cord as for inguinal hernia; then clamp and retract flaps.



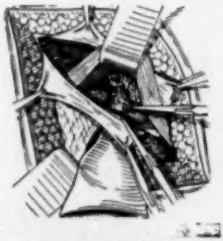
14. Expose medial half of shelving edge of inguinal ligament, retract cremaster layer with underlying round ligament cephalad, then scissor cremaster attachment to inguinal ligament.



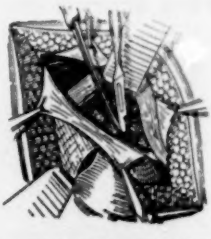
15. Retract round ligament with overlying cremaster from inguinal ligament. Incise exposed fascia from pubic tubercle to deep epigastric vessels parallel to and ½ cm. above inguinal ligament.



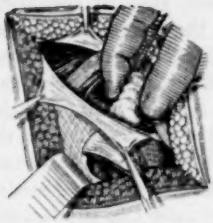
16. Insert finger into adipoareolar fossa and isolate neck of sac as it passes into femoral canal.



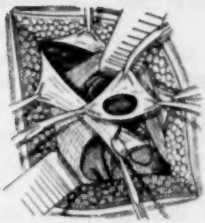
17. Retract transversalis fascia cephalad exposing hernial sleeve. Look for an anomalous obturator artery at the medial border of the femoral ring. Ligate and cut if present.



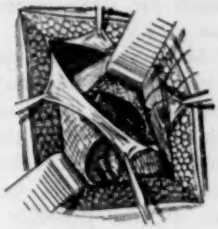
18. Insert grooved director into medial aspect of femoral canal and incise lacunar ligament medially over grooved director.



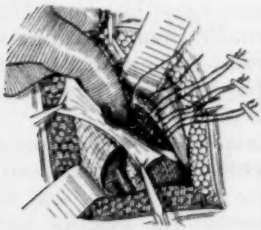
19. Reduce the herniated structures through the enlarged femoral ring; release clamp and pull sac out of femoral canal changing femoral into direct inguinal hernia.



20. Apply clamps to edge of sac, then purse-string and ligate neck of sac. Excise sac and cut ligature.

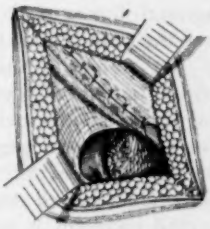


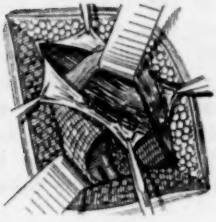
21. Depress floor of inguinal fossa, then approximate medial cut edge of transversalis fascia to pubic ligament.



22. *(Left)* Continue outward, push femoral sheath laterally with finger as final one or two sutures between transversalis fascia and pubic ligament are placed.

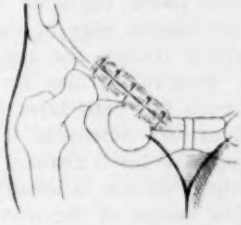
23. *(Left)* Suture conjoined structures to inguinal ligament.





24. *(Right)* Reposit round ligament and reconstruct external ring by suturing cruri together; then approximate balance of external oblique flaps.

25. *(Right)* Approximate skin with vertical mattress sutures.



NOTES

Because of a wider femoral ring, femoral hernia occurs 6 times oftener in females than in males, and owing to the more rigid boundaries of the femoral ring, the incidence of strangulation is much higher with femoral than with inguinal hernia.

Diagnosis of femoral hernia may be difficult. The femoral mass may slip up and then ride over the inguinal ligament and thus be mistaken for an inguinal hernia. Inguinal adenitis with pain, nausea, vomiting, and cough impulse has been mis-

taken for strangulated femoral hernia and vice versa.

Many authorities describe separate femoral and inguinal incisions for the repair of femoral hernia. The unpredictability of the findings and the difficulty of reducing the contents permit no such empiricism. An incision through which the entire inguinofemoral region can be reached should be used routinely.

Section of the lacunar ligament does not always permit reduction of the herniated structures. In such cases the incision into the lacunar ligament may be carried up into the inguinal ligament in Z fashion, or over the pubic tubercle cutting thereby the pubic insertion of the inguinal ligament. After the femoral ring is opened widely and the sac and contents are properly handled, the cut ends of the inguinal ligament are sutured together, or the severed ligament is sutured down to the pubic ligament together with the medial edge of the transversalis fascia during the repair.

Femoral hernias are covered with much fat, each layer of which may look like omentum. The texture of omental fat is distinct, however, and the omentum is usually preceded by the escape of the transudate in the sac. Strangulated or irreducible omentum may be segmentally ligated and excised. When doing so, the proximity of the transverse colon should be kept in mind and every clamp or suture should be applied with the assumption that the transverse colon may be just beyond.

Ordinarily the obturator artery arises from the internal iliac artery. In approximately 25% of specimens it arises from the external iliac artery instead, either directly or from a common trunk with the deep epigastric artery. It then swings above the femoral vein to descend to the obturator foramen. Thus a hernial mass may push it to the medial or to the lateral aspect of the femoral ring. The artery may therefore be injured in manipulations around the femoral ring or section of the lacunar ligament. Likewise, both the pubic branch coursing along the inguinal ligament and the external spermatic branch of the deep epigastric artery may cause bleeding. The external spermatic branch may pierce the transversalis fascia medial to the cord and thus become injured during the dissection.

The proximity of the femoral vein both within the femoral sheath lateral to the femoral ring, and in the thigh behind the superior and inferior cruri of the falciform margin of the fascia lata, must be kept clearly in mind during the repair. Should the edge of the vein be punctured inadvertently during the repair, the bleeding point should not be clamped. The suture should be tied, not pulled out, and the bleeding will stop.

The function of sutures, here as elsewhere, is to hold surfaces together until fibroblasts grow between. Tissues are strangulated and destroyed by gross handling with bulky suture material and big bites. The bite of the needle need be no deeper, and the weight of the suture material no heavier than required to approximate adjoining surfaces.

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but keeps the cough reflex

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[3]	Sodium Citrate	1.2 Gm.

Medical Forum

Discussion of articles published in MODERN MEDICINE *is always welcome. Address all communications to The Editors of* MODERN MEDICINE, *84 South 10th St., Minneapolis 3, Minn.*

Non-Union of the Medial Malleolus*

TO THE EDITORS: We are in complete agreement with the comments of Dr. Sam W. Banks on the treatment of nonunion of fracture of the medial malleolus. In our opinion one seldom finds a fibrous union sufficiently strong to guard against some pain and swelling of the ankle on a normal routine.

Screw fixation is the only thing we have found that gives adequate stability, and cancellous bone is preferable to cortical bone in promoting union. It is possible that the percentage of nonunions would be materially decreased by adequate primary reduction of the fragment even if primary reduction meant open operation and screw fixation at the time of original treatment.

R. G. TOWNSEND, M.D.
Calgary, Alb.

► TO THE EDITORS: The method described by Dr. Sam W. Banks seems to be excellent and quite simple to perform. It is really a modification of various methods that have been published from time to time. Its simplicity recommends it.

I believe, however, that when the fracture of the malleolus involves the joint, the symptoms of which the patient complains and the signs noted on physical examination, such as Dr. Banks mentions, are usually from an associated traumatic arthritis resulting from damage to the ankle joint. The healing of the fracture will, in my opinion, not alleviate these symptoms, and I think the operation should be kept entirely for cases with definite mobility of the fragment. Certainly a bone graft of the internal malleolus, such as described, is not going to relieve the accompanying arthritis of the ankle joint.

H. J. SPOONER, M.D.
Regina, Sask.

► TO THE EDITORS: The article by Dr. Sam W. Banks is precise and well illustrated.

The method described, which has been used for some years for painful nonunion of the medial malleolus, gives excellent results.

I believe that there is no better technic to advise for treatment of these cases.

LIONEL GROLEAU, M.D.
Sherbrooke, Que.

*MODERN MEDICINE, Oct. 1, 1949, p. 73.

NEW, DRAMATIC THERAPY FOR THE RELIEF OF PAIN ND LESIONS OF HERPES ZOSTER

DESCRIPTION: Protamide is a sterile, aqueous colloidal solution of a specially processed proteolytic enzyme, for the maximum relief of nerve root pains of Herpes Zoster and Tabes Dorsalis.

CLINICAL RESULTS: Highly gratifying clinical results have been obtained with the use of **Protamide** (Sherman) in the treatment of the extremely resistant herpes syndrome. Pain has been relieved in the great majority of herpes cases within four to forty-eight hours and lesions have healed in ten days or less—regardless of the particular nerve roots involved. Complete clinical data may be obtained by writing for the Protamide literature on Herpes Zoster and a recent reprint on Protamide for Tabes Dorsalis.

SO CLINICALLY PROVED
R THE LIGHTNING PAINS
AND ATAXIA
OF TABES DORSALIS

DOSAGE: In Herpes Zoster the recommended dosage is 1.3 cc of Protamide intramuscularly each day from two to four days. Causes no reactions — comparatively painless — no contraindications or incompatability. All Protamide is clinically tested for positive results. Canbe stored at room temperature without loss of potency.

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Diagnostix

Here are diagnostic challenges presented as they confront the consultant from the first clue to the pathologic report. Diagnosis from the Clue requires unusual acumen and luck; from Part II, perspicacity; from Part III, discernment.

Case MM-172

THE CLUE

ATTENDING M.D: The patient I'd like you to see today was in good health until a month ago, when he began to have diarrhea, six to ten loose stool movements a day without blood or cramps, and malaise. He worked for a week and then consulted a doctor, who treated him symptomatically. The doctor, on the note requesting admission to the hospital, said that the man's temperature was between 101 and 103° each day and that a trial of penicillin had not brought the fever down and was therefore discontinued. The patient is sixty-eight years old. He has just been admitted to the hospital.

VISITING M.D: *(Walking into the room and examining the patient)* He appears quite sick. I note his temperature is 103°, pulse 90; he has a maculopapular rash, some of the lesions are as large as 2 cm. on the abdomen and back. The liver is palpable but I cannot feel the spleen. Better get the routine laboratory work, including blood cultures. What do you think the man has?

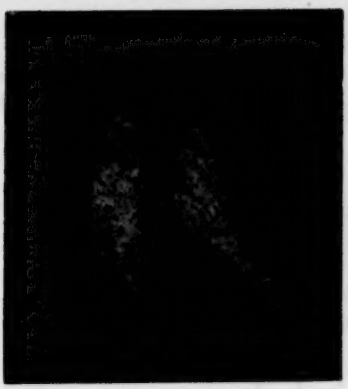
ATTENDING M.D: Well, I noted a systolic apical murmur, which you didn't mention. I'm inclined to think that he has subacute bacterial endocarditis.

VISITING M.D: But the disease began with diarrhea.

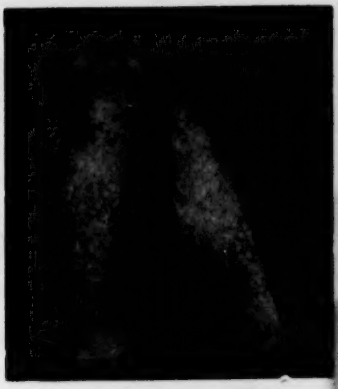
ATTENDING M.D: I know. Of course, we have no good evidence as yet of subacute bacterial endocarditis, but I intended to give him large doses of penicillin at once.

VISITING M.D: Better get several blood, urine, and stool cultures first.

(Continued on page 82)



Psoriasis of 2½ years' duration.



Same case after 2 months' treatment with Mazon.

Remission of the psoriatic lesion evaluates the effectiveness of MAZON

• It is the marked capriciousness of psoriasis which makes difficult the evaluation of any method of treatment, but dermatologists agree that the most satisfactory approach to an effective regimen usually commences with local therapy.

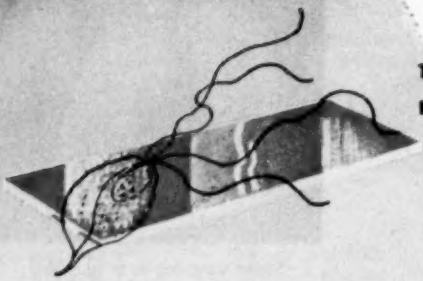
• When systemic or metabolic involvement is not manifested—even though the condition is generalized or stubbornly resistant—Mazon has demonstrated its value in arresting psoriatic lesions and promoting symptomatic relief.

• Mazon is a compound of mercury salicylate ⅓ gr. to the ounce; benzoic acid; sodium stearate; salicylic acid and tars.

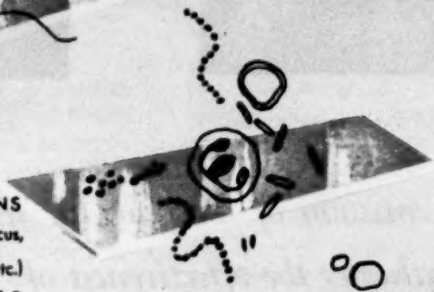
BELMONT LABORATORIES, Philadelphia, Pa.

MAZON

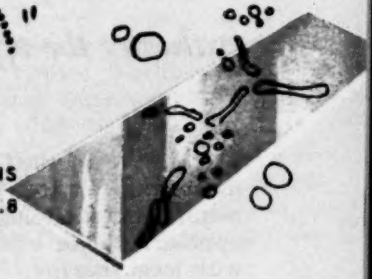
FOR **all** TYPES



TRICHOMONAS VAGINALIS
pH 5 to 6



MIXED INFECTIONS
(Staphylococcus, Streptococcus,
Escherichia coli, etc.)
pH 5.8 to 7.8



MONILIA ALBICANS
pH 5.5 to 6.8

Floraquin restores the normal flora.

SEARLE

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OF VAGINITIS...

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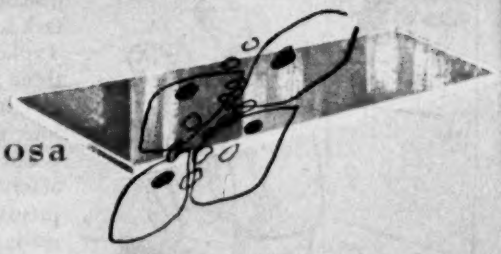
DÖDERLEIN BACILLI
pH 3.8 to 4.4

and normal
vaginal mucosa



PART II

VISITING M.D: Do you know of epidemic diarrhea in town?

ATTENDING M.D: I haven't heard of any.

VISITING M.D: Let's call the Department of Health and ask them. *(The call is made. The Department of Health has no reports at present of any similar infectious gastrointestinal diseases.)*

VISITING M.D: The patient's abdomen is quite distended. I think you should give him a milk diet. He has not vomited. I will talk to him some more. *(Long interview with the patient)* The patient tells me that he had fever for two or three days at the onset, then he felt well for about four or five days. The fever had a brisk recurrence and has been up and down ever since. Whatever the man has, it is a relapsing illness, or at least it has had a significant relapse. And yet the signs aren't those of a relapsing fever.

ATTENDING M.D: No.

VISITING M.D: You'd better put a Wangensteen tube down and start suction.

"See here, Doctor, I'm in a hurry."

PART III

ATTENDING M.D: *(Two days later)* The blood and stool cultures both came back positive for *Eberthella typhosa;* we have started Chloromycetin. The temperature today is 105°, pulse 120. He has numerous petechial hemorrhages. White count is normal. The abdominal distention has diminished considerably; we have removed the tube.

PART IV

VISITING M.D: Just because we don't see much typhoid fever is no reason why we should not be very much on the alert for it. I'm glad to have this opportunity of discussing typhoid fever, which has practically disappeared from the state. We must get the epidemiologist to investigate this case and discover a possible carrier. Most likely the patient contracted the disease from some carrier. His attack has been a relatively mild one. Typhoid fever used to run about three weeks before the patient began to improve. Sometimes it ran four to five weeks. The skin rash is obviously composed of the characteristic rose spots. I'm not surprised you didn't recognize them, since you had never seen them before. I saw them when I was an intern. We must watch out that the artificial controls over water

when

temptation

crashes

the

party

● Uninvited he comes, arousing a mutinous appetite, then destroying her every intention of following her diet. When these dietary misdemeanors become frequent, there couldn't be a better time to employ DESOXYN Hydrochloride. By its combined effect of depressing the appetite and elevating the mood, DESOXYN helps you encourage dietary adherence.

Weight for weight DESOXYN is more potent than other sympathomimetic amines. Thus small amounts produce the desired cerebral effect without producing undesired side-effects. One 2.5-mg. tablet before breakfast and another about an hour before lunch is usually sufficient. A third tablet may be taken in midafternoon if necessary and if it does not cause insomnia. DESOXYN's other advantages are faster action, longer effect. In small oral doses, no pressor effect has been observed. With proper dosage, DESOXYN is safe, simple, effective. Abbott

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DESOXYN® hydrochloride

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TABLETS
2.5 and 5 mg.

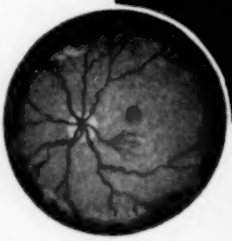
ELIXIR
20 mg. per fluidounce
(2.5 mg. per fluidrachm)

AMPOULES
20 mg. per cc.

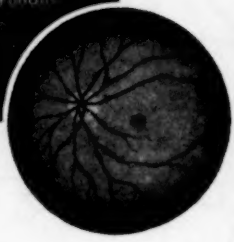
RUTAMINAL*

the protection of **rutin**[1] the action of **aminophylline** the sedation of **phenobarbital** —for use in selected cardiovascular and diabetic conditions in which excessive capillary fragility presents a complicating hazard —bottles of 100 tablets

Ocular Fundus in Degenerative Vascular Disease—Hypertension, Diabetes, Arteriosclerosis —note tortuous blood vessels, areas of exudation, hemorrhagic areas



Normal Ocular Fundus



[1]In keeping with newer clinical findings, the rutin content of RUTAMINAL has been increased to 60 mg. per tablet (three times the former rutin content) at no increase in cost to the patient.

*RUTAMINAL is the trademark of Schenley Laboratories, Inc. and designates exclusively its brand of tablets containing rutin, aminophylline, and phenobarbital.

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and milk supply do not break down so that we have epidemics again. Although aureomycin and Chloromycetin have both been recommended for the treatment of typhoid fever, Chloromycetin definitely seems to be the drug of choice. The 3-gm. initial dose is followed by 2 gm. daily for about a week after symptoms have subsided. We'll still be concerned with the problem of carriers if Chloromycetin doesn't eradicate biliary typhoid foci. We will, of course, need three successive negative stools and urine cultures at intervals of at least one week, beginning one week after subsidence of clinical symptoms and after the drug has been stopped for a week. We should make sure that all the doctors and nurses in the hospital who have been exposed to the patient in any way have adequate typhoid vaccination. Typhoid vaccine administered even after exposure to typhoid reduces the infection rate. Certainly the family should be vaccinated.

ATTENDING M.D: Would you give Chloromycetin in divided doses?

VISITING M.D: Yes.

ATTENDING M.D: What dose would you give of the vaccine?

VISITING M.D: For anyone who had had a full course of vaccine within the year, give 0.1 cc. intradermally. If the interval is longer, 0.5 cc. subcutaneously.

ATTENDING M.D: Do you believe the patient may have a relapse after we stop the Chloromycetin?

VISITING M.D: It is quite possible. We should continue the drug longer than seems necessary, since the exact effect of Chloromycetin with this relatively rare disease is not known.

"So you just got back from a vacation? Hmm. In that case I'd say you need a good long rest."

Life's Weary Moments

Think of a gag that fits the illustration. For every issue a new gag is published and the author is sent $5. The August 1 winner is

John Pellettieri, M.D.
Cicero, Ill.

Mail your caption to The Cartoon Editor
Caption Contest
No. 1
MODERN MEDICINE
84 South 10th St.
Minneapolis 3, Minn.

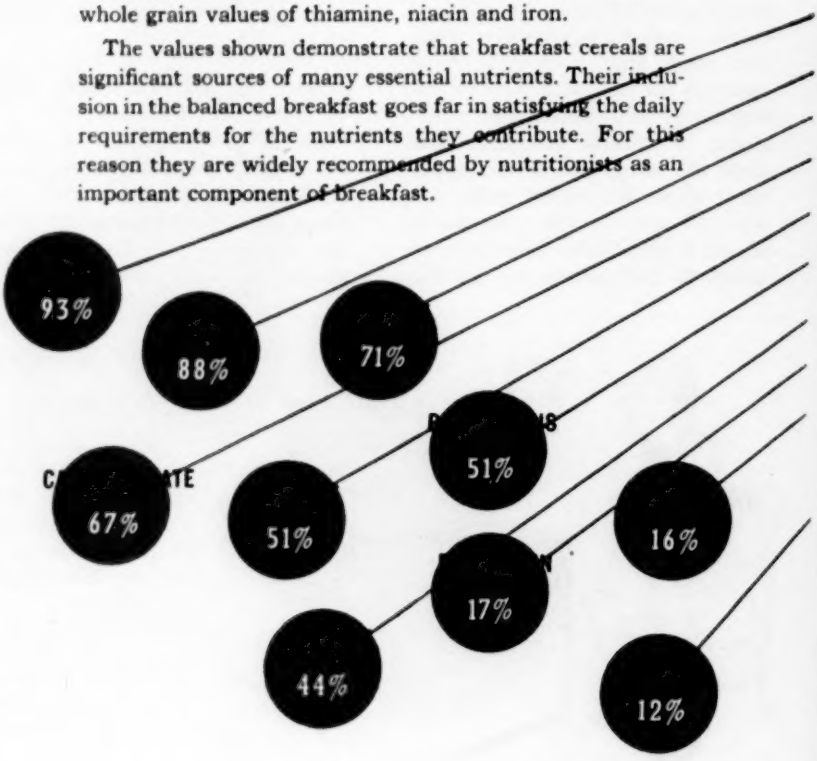
WHAT THE BREAKFAST CEREAL CONTRIBUTES

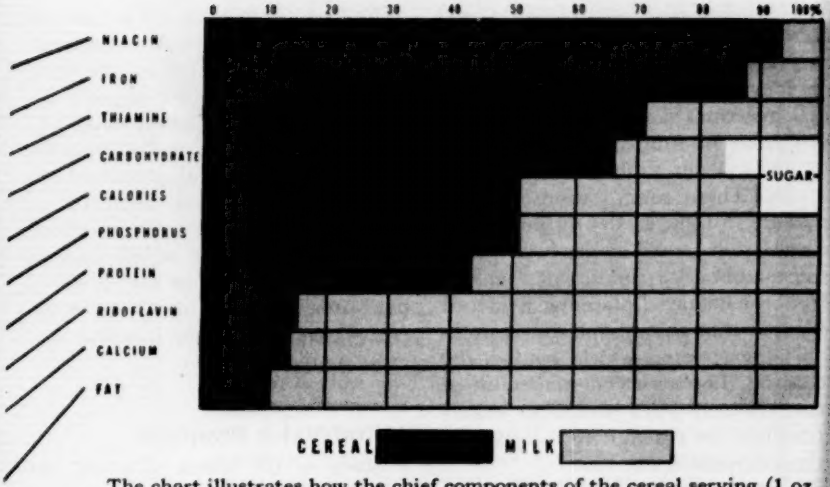
in the Cereal and Milk Serving

That breakfast cereals make a significant contribution to the over-all nutrient content of the cereal and milk serving is readily apparent from the bar chart. In the case of five of the nine nutrients, as well as in calories, the breakfast cereal alone provides more than 50 per cent of the total amounts contributed by both cereal and milk, and almost 50 per cent of the protein.

These figures are based on composite averages of all breakfast cereals—whole grain, enriched, or restored to whole grain values of thiamine, niacin and iron.

The values shown demonstrate that breakfast cereals are significant sources of many essential nutrients. Their inclusion in the balanced breakfast goes far in satisfying the daily requirements for the nutrients they contribute. For this reason they are widely recommended by nutritionists as an important component of breakfast.





The chart illustrates how the chief components of the cereal serving (1 oz. of breakfast cereal, 4 oz. of milk, 1 teaspoonful of sugar) nutritionally supplement each other.

In addition to contributing a host of essential nutrients, breakfast cereals perform another, largely unrealized, function. In 1948, an estimated two billion quarts of milk were consumed with breakfast cereals. This quantity represents 16 billion cereal servings, or 66 quarts of milk per family per year. In view of the fact that about 40 per cent of our adult population does not drink milk as such, breakfast cereals perform the outstanding function of bringing milk into the dietaries of many adults who otherwise would not receive this essential food. Thus they contribute to the calcium intake of many individuals and aid in overcoming the widespread calcium deficiency of many adult diets.*

*Stearns, G.: Human Requirement of Calcium, Phosphorus and Magnesium, Council Report, J.A.M.A. *142*:478 (Feb. 18) 1950.

The presence of this seal indicates that all nutritional statements in this advertisement have been found acceptable by the Council on Foods and Nutrition of the American Medical Association.

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Short Reports

OBSTETRICS

Complications of Late Pregnancy

Thromboplastin may be a chief activator of some diseases of late pregnancy. Dr. Charles L. Schneider of Wayne University, Detroit, finds that reactions similar to some complications of human pregnancy can be induced in rabbits by placental injury. These complications are apparently produced by intravascular coagulation caused by the presence in the maternal circulation of material from the damaged placenta. Evidence suggests that thromboplastin is probably the material which initiates the clotting. The most common result of the trauma, liver necrosis, closely parallels the reaction to injection of thromboplastin extracts.

Surg., Gynec. & Obst. 90:613-622, 1950.

ANTIBIOTICS

Cyclotron-purified Drugs

Antibiotics may be sterilized by a high-voltage atom-smashing machine, similar to the cyclotron employed for theoretic investigations. At the Upjohn Pharmaceutical Company, Kalamazoo, Mich., a 2,000,000-volt accelerator beams a 175,000-mile-per-second stream of electrons into tubes and bottles of penicillin and streptomycin to free the antibiotics of bacteria. Previously, heat, filtration, and chemical treatment had been necessary for sterilization.

METABOLISM

Thiourea Hyperglycemia

Oral administration of potassium iodate appears to protect rats against hyperglycemia induced by thiourea injections. In untreated animals injected with the goitrogenic drug, Dr. David E. Mann, Jr., of Purdue University, Lafayette, Ind., observed an average rise in blood sugar of 91 mg. per 100 cc. The same injections produced an increase of less than 15 mg. per 100 cc. in rats that received potassium iodate in drinking water.

Proc. Soc. Exper. Biol. & Med. 73:657-658, 1950.

EXPERIMENTAL SURGERY

Mitral Valve Prosthesis

Study of the effects of mitral valvular disease on cardiovascular and respiratory physiology is facilitated by use of an artificial mitral valve. A prosthetic valve designed by Dr. G. Rehmi Denton and co-workers of Albany Medical College, N.Y., can be substituted surgically for the mitral valve of dogs. The prosthesis, which has no moving parts, may be constructed so as to give varying degrees of mitral stenosis or regurgitation. Several dogs have lived for as long as five months with the artificial valve in place. The animals show no ill effects if the prosthesis is constructed to function as a normal valve.

Federation Proc. 9:31, 1950.

2 to 3 cc. KOAGAMIN®

PREOPERATIVELY—2 to 3 cc. of KOAGAMIN—prevents oozing, allows the surgeon a clearer field of operation and reduces the need for local hemostatic measures.

POSTOPERATIVELY—2 to 3 cc. of KOAGAMIN—aids control of secondary bleeding.

THERAPEUTICALLY—2 to 3 cc. of KOAGAMIN—aids in control of bleeding in gastric and duodenal ulcers, hematemesis, hematuria, hemorrhagic purpura, epistaxis, blood dyscrasias, etc.

KOAGAMIN's prompt action—a matter of minutes—differs from that of vitamin K, which must first be converted to prothrombin in the liver—a matter of hours. Vitamin K is useful *only* in cases where prolonged prothrombin time is a factor. *Even in these cases,* KOAGAMIN should also be used for its rapid action.

Supplied in 10 cc. diaphragm-stoppered vials.
Write for comprehensive dosage chart and literature.

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Doctor to Doctor

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Pansulfa offers you the most reliable safeguards against crystalluria and renal damage. This effective triple sulfonamide contains sulfacetamide—the least toxic sulfonamide studied.* Your prescription for Pansulfa offers

1 The established antibacterial power of three sulfas.

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Pleasant tasting

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SULFACETAMIDE
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Each teaspoonful or tablet contains 0.5 Gm. (7½ grs.) of the rapidly soluble sulfonamides 1:1:1

*see Lehr, Dr. Federation Proc. 8:315 (1949)

Merrell 1828 CINCINNATI • U. S. A.

"PANSULFA" trade-mark

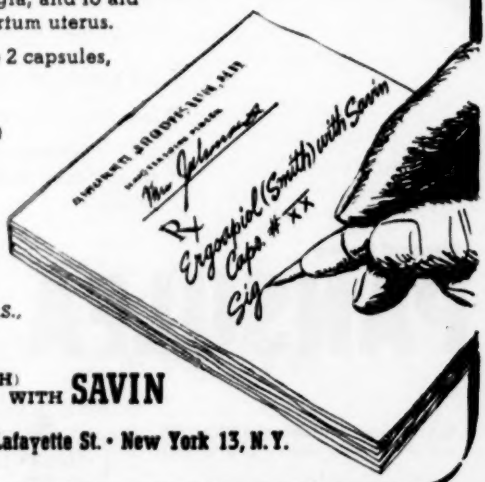
Detailed Dosage Data for Physicians

A 20-page brochure prepared exclusively for the medical profession presents busy physicians with detailed dosage information relating to quantity, frequency and duration of administration in relation to menses, as well as indications, rationale, etc., regarding ERGOAPIOL (Smith) with SAVIN. This time-tested uterine tonic is thoroughly described in this brochure, "Menstrual Disorders—Their Significance and Symptomatic Treatment". A copy, available to physicians only, will be supplied on request. Ethical since its inception, ERGOAPIOL (Smith) with SAVIN is dispensed only on your prescription.

INDICATIONS: Amenorrhea, Dysmenorrhea, Menorrhagia, Metrorrhagia, and to aid involution of the postpartum uterus.

GENERAL DOSAGE: 1 to 2 capsules, 3 to 4 times daily—as indications warrant.

In ethical packages of 20 capsules each, bearing no directions.



M.H.S.

Ethical protective mark, M.H.S., visible only when capsule is cut in half at seam.

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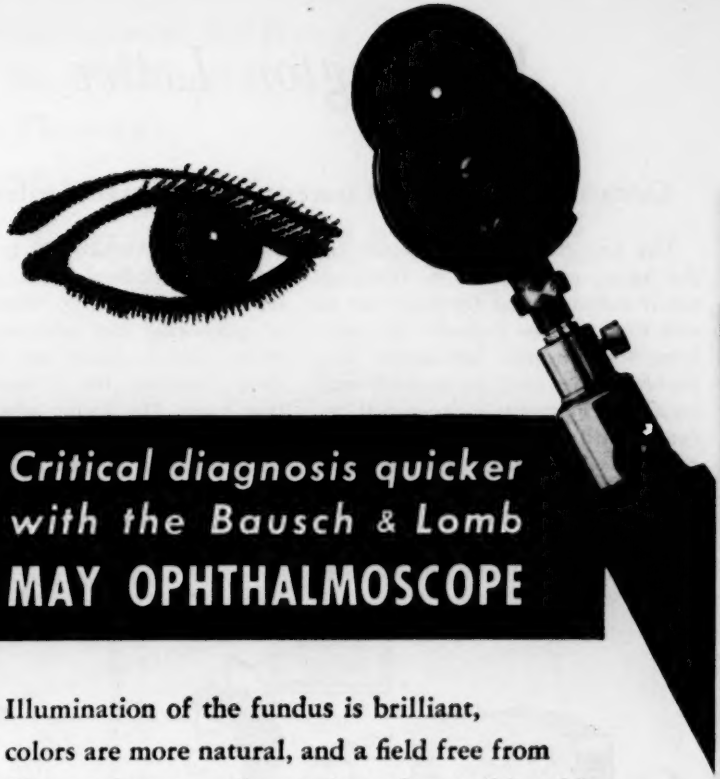

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Illumination of the fundus is brilliant, colors are more natural, and a field free from filament images and spots is made possible with the new Daylight Blue Light and May prism. Lenses, fingertip controlled, range from +20 to −25.00D with numbers magnified and illuminated for easy reading in dark. Adjustable rheostat in handle. Available in handsome, durable case.

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Washington Letter

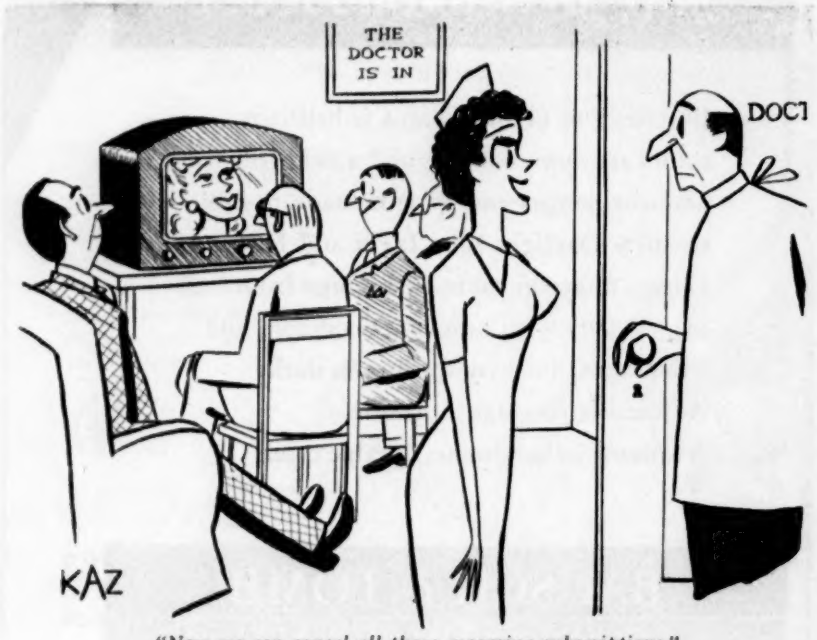
Geriatrics Is of First Concern to National Conference

The first National Conference on the Aging, which meets in Washington this month, will consider how to care for and how to make life satisfying for the aged and aging. The problems are new, as medical and social developments are reckoned, because until fifty years ago people rarely lived to old age and the shortcomings of a society that had little security or dignified comfort for the aged were largely unappreciated.

The conference will run for three days, from August 13 to 15. According to Federal Security Administrator Oscar Ewing, whose agency is sponsoring the meeting, government officials have no blueprint, even tentative, for a solution. But they hope, Mr. Ewing says, that out of the conference will come a better understanding of the problem and better direction of effort.

To the conference have been invited lay and professional people

(Continued on page 98)



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The Most Effective
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NOW ALSO with LIVER AND VITAMINS (including B_{12})

For iron-deficiency anemias associated with excessive drain on nutritional reserves—e.g., in chronic infection, malignancy, prolonged anorexia, post-surgical and other convalescent states.

Mol-Iron with Liver and Vitamins provides, in each capsule:

Mol-Iron	198 mg.
Desiccated Whole Liver (equivalent to 1.8 Gm. whole liver—minus water content only—not a fraction or an extract)	0.45 Gm.
Thiamine hydrochloride	1 mg.
Riboflavin	1 mg.
Vitamin B_{12}	1 μg.
Nicotinamide	5 mg.
Pyridoxine hydrochloride	0.5 mg.
Calcium pantothenate	1 mg.

Supplied in bottles of 100 capsules. Average dose 1 to 2 capsules three times daily after meals.

WHITE LABORATORIES, Inc., Pharmaceutical Manufacturers, Newark 7, N. J.

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CLINICAL EFFICACY

PROLONGED (24 HOUR) RELIEF

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antirheumatic superiority . . .

Experience in the administration of the antirheumatic Pabalate confirms the efficacy, reliability and safety* of its synergistic combination of salicylate and para-aminobenzoic acid.[1,2,3,4,5] Pabalate has been reported not only to provide "twenty-four hour pain relief,"[6] but its use (unlike that of salicylate alone) carries a high degree of freedom from toxic reactions.[6]

INDICATIONS rheumatoid arthritis, fibrositis, acute rheumatic fever, gout, osteoarthritis. The Liquid is also recommended as a replacement for analgesic-antipyretic medication generally.

FORMULA each Pabalate Tablet or each 5 cc. (one teaspoonful) of Pabalate Liquid contains sodium salicylate, U.S.P. (5 grs.) 0.3 Gm., para-aminobenzoic acid (as the sodium salt) (5 grs.) 0.3 Gm.

SUPPLIED Pabalate Tablets are supplied in bottles of 100 and 500; Pabalate Liquid in pints and gallons.

REFERENCES

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6. Smith, R. T.: J. Lancet, 70:192, 1950.

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Robins

*The data for these graphs are derived from the tabular material accompanying *"Treatment of Rheumatoid Arthritis and other Rheumatic Conditions with Salicylate and Para-Aminobenzoic Acid: a study of 125 patients."* by Richard T. Smith, J. Lancet, 70:192, 1950.

from every phase of American life concerned with the aged—from educational, industrial, fraternal, civic, labor, and medical organizations. However, invitations went out to individuals, not to organizations.

More than 1,200 invitations were sent, and acceptances to date indicate that about 1,000 persons will attend. Work sessions or discussion groups are scheduled in each of the following fields: population changes, employment and rehabilitation, financial income, health maintenance and service, education, family life and housing, recreation, religion, community organization, and the training of personnel for working with the aged.

FSA officials are planning for a large representation from various fields of medicine, although no organization will be represented as such. Mr. Ewing said that his only thought on the health question is that the conference will result in better appreciation of what specific medical knowledge should be applied to old age. He also hopes to eliminate some duplication of medical research in geriatrics and to facilitate exchange of information.

In a background report on the aging population, FSA lists the major objectives as control of chronic disease, research into the aging process, development and instruction in rules for living with the infirmities and illnesses of old age, and plans for the care of ill and infirm old people. Discussions at the conference will center around these points.

In this report FSA states:

> Crippling and disabling illnesses act as a drain both on the individual and on society by preventing gainful employment, by setting up a group of people who are dependent on others for their livelihood and care by necessitating vast networks of nursing homes and specialized institutions.

In the same report, FSA strongly recommended adoption of a system of federal insurance for the temporary and permanently disabled.

Attention of the medical profession is directed toward research on how, why, and what makes people age and the manner of deterioration of function of tissues, muscles, and organs.

Most physicians are aware, in a general sense, that treatment of the aged was not a pressing problem before 1900 and that old people did not then constitute the social and economic burden they do now. FSA has presented some statistical information on the change. In the fifty years before 1900, life expectancy had increased only seven years, from forty to forty-seven. In 1900 almost 1 in every 2 persons was under twenty years of age, and only 1 in 25 had reached sixty-five years. By 1940, the proportion of children and youth had decreased to 1 in every 3 persons, and the proportion of the aged (sixty-five) had increased from 1 in 25 to 1 in 14. This year the ratio will be about 1 in every 13 persons. Expressed in percentages, in 1900 the aged constituted 4.1% of our population; this year they will constitute about 7.6%.

Taft Stands Pat

An off-the-record visit by Oscar Ewing to Sen. Robert Taft (Rep., Ohio) was part of the administration's strategy on Reorganization

now Feojectin

a completely new form of iron therapy

"We can now treat successfully those refractory iron-deficiency anemias that have previously defied us."

(Editorial, The Lancet, Jan. 1, 1949)

Feojectin is a stable solution of saccharated iron oxide for *intravenous injection only*. It is particularly indicated for those cases of iron-deficiency anemia in which oral medication (1) is ineffective, (2) is not well tolerated, or (3) produces results too slowly.

Feojectin is supplied in boxes of six 5 cc. ampuls. (Each ampul contains the equivalent of 100 mg. of elemental iron.)

Feojectin

for use when oral iron fails

Smith, Kline & French Laboratories
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'Feojectin' Trademark

Plan No. 27, which would make FSA into a department of Health, Education, and Security. A similar proposal was made last year, only to lose out when Senate voted it down. Last year, the idea, because it came as a surprise to most House and Senate members, aroused needless opposition.

This time President Truman himself saw some of the senators, and Budget Bureau officials talked the idea over with others from both parties; Mr. Ewing volunteered to try to convince Sen. Taft. Neither Sen. Taft nor Mr. Ewing disclosed what was said at their meeting. However, Sen. Taft was not swung over.

A week or so after talking with Mr. Ewing, the Senator announced that he would oppose Plan 27 for the same reasons that he opposed the proposal last year. He objected because health activities would be further entangled with education and social security matters, rather than set up in an independent department or agency. Sen. Taft also said that he was fearful that all the top level thinking in the proposed new agency would be influenced by social rather than medical factors.

Late in the session Rep. Charles A. Wolverton (Rep., N. J.) introduced a bill for "reinsuring" health insurance plans, a provocative suggestion which served to get down in writing some of the ideas that had been advanced by, among others, Harold Stassen. Briefly, the bill proposed to set up a federal corporation that would protect insurance plans against catastrophic illnesses.

Here are the major provisions: Insured groups would pay 2% of their gross premiums to the corporation. The corporation would have to meet the cost of an illness up to $1,000 in any one year. After $1,000, the corporation would pay two-thirds of all costs but the individual insurance plan would have to pay the remaining third. For hospital costs, the patient himself would be required to pay $1 a day. The bill is carefully worded to rule out private-profit insurance plans.

The bill does not offer protection against a wave of high-cost cases, all under $1,000, which have proved disastrous to many small nonprofit companies. Instead, a system is designed to limit the corporation's liability in case a company goes broke. If this happens, the corporation remains liable to an individual policy holder for the same benefits it would have paid the defunct association, but the corporation's liability ceases after one year. Mr. Wolverton's bill is attracting considerable interest from groups which want to see a wide extension of medical benefits, yet are opposed to national health insurance as represented in the administration's Thomas-Murray-Dingell bill.

GI Medical Education

A ruling by Veterans Administration has ended an argument over extending the time in which veterans will be eligible for medical education. The deadline now is July 25, 1951. If the GI hasn't started his course by that time, he is no longer entitled to educational benefits.

On the assumption that a large number of qualified veterans would be unable to enter crowded medical

schools by that date, H.R. 7235 proposed extending the deadline. At a hearing on the bill, it was brought out that Budget Bureau officials were firmly opposed to the new deadline. They argued that this deadline was carefully selected as one which would give the GI every reasonable opportunity to start his medical course.

VA finally settled the argument by making the following ruling: Any eligible veteran who starts his premed course by next July 25 but is delayed in entering medical school by conditions beyond his control will be considered eligible for medical school benefits at any future date he may gain admission to medical schools. VA will be the judge of whether the student has made energetic efforts to gain admission to a school.

VA anticipates that only a relatively few veterans will fall in this class.

Washington Notes

A special committee appointed to advise President Truman on VA hospital problems and requirements may have another and more important role. Mr. Truman will be able to refer to it any VA construction legislation which might be unnecessary or purely political in conception. This way, if the committee recommends a presidential veto Mr. Truman will not have to stand up alone against criticism, as he was obliged to do early last year when he cut

RELAX THAT SPASM with MESOPIN

When pain, heartburn, belching, nausea, or unstable colon are due to gastrointestinal spasm, Mesopin provides an effective means for prompt relief. Its selective antispasmodic action on the digestive tract controls spasticity without the undesirable side effects of atropine or belladonna. Thus, symptomatic relief of many common disturbances of the stomach or intestines can be achieved with discrimination and safety. Mesopin is indicated for the relief of gastrointestinal spasticity, such as pylorospasm, cardiospasm, spastic colon, and biliary spasm.

MESOPIN (brand of homatropine methyl bromide)

SELECTIVE GASTROINTESTINAL ANTISPASMODIC

SUPPLY: Elixir in 16 ounce bottles; tablets in bottles of 100.
MESOPIN (homatropine methyl bromide)—2.5 mg. per teaspoonful of elixir or per tablet. Also supplied: MESOPIN-PB*—2.5 mg. Mesopin and 15 mg. (1/4 gr.) phenobarbital per teaspoonful of elixir or per tablet.

Detailed literature and samples on request.

Endo®

*PB abbreviated designation for phenobarbital.

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back the VA hospital construction program.

Agriculture Department is making a mass survey of its 11,000 employees in the Washington area to detect diabetes; active cases are referred to private physicians for treatment.

U.S. Public Health Service has scheduled examinations for medical officers for October 9 through 11. Salaries are $5,686 and $6,546.

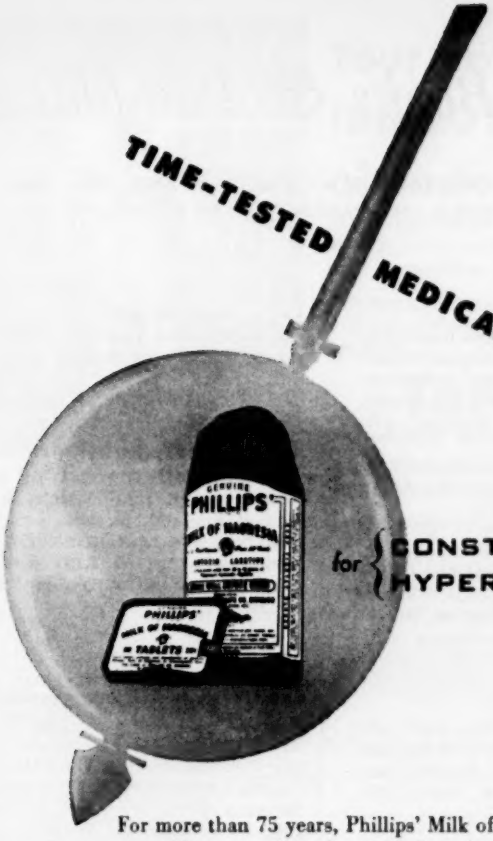
Five Public Health Service officers have been assigned to help carry out a campaign against malaria and other acute diseases in Indo-China.

Dr. Leonard A. Scheele, U.S. Surgeon General, made a direct appeal to Congress for a higher ceiling on United States appropriations to World Health Organization. He said WHO—Russia and satellite countries have dropped out—offers a means of carrying on the cold war by improving the health and productivity of noncommunist countries. Just returned from the WHO assembly meeting in Geneva, Dr. Scheele buttressed his argument with facts about the world's health and the WHO record of accomplishment.

Agreement has finally been reached by Food and Drug Administration and retail druggists on a new prescription code.

Most tuberculosis cases among VA staffs do not originate in personnel serving in TB hospitals but in other hospitals.

Start on the new Armed Forces Pathology Institute has been authorized.



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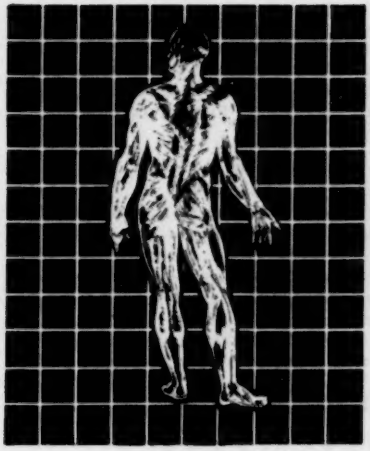

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**Lowenfish, F.P., N.Y. State J. Med., 50:922 (Apr. 1) 1950.*

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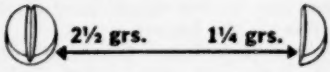

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Inevitable Progression

The doctor had advised the man to slow down in his living. First the patient cut out tea, then coffee, smoking, and drinking. Next he cut out women, and now he's cutting out paper dolls. —I.H.O.

"What I want," said the patient who had just undergone an operation for ischiorectal fistula, "is a pretention enema."—P.W.V.

"Robber! Thief! Bandit! Go get yourself a pair of glasses."

Willing to Help

A friend of mine decided to send his fourteen-year-old son to a prep school but felt that he first should have a talk with him on the subject of sex.

"Now that you are going away to school, Willy," he said, "I feel that I should discuss with you what I consider a very important matter. I am at a loss, however, as just how to start, not knowing how much you know about sex."

"That's o.k., dad," responded the son. "What do you want to know about it?" —A.H.M.

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Vials of 25 mg. with dropper; solution prepared by adding 5 cc. of distilled water.

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For the Record

My new secretary, a very conscientious girl, was puzzled by an entry in my notes on an emergency case: "Shot in the lumbar region." After a moment's study she brightened, hitched her chair up to the typewriter and typed into the record, "Shot in the woods."—F.M.S.

"I just love orchids," said the night nurse. "Just a case of orchiditis, I suppose."—B.S.

Time for a Dry Spell

I had given a new mother with vaginitis a prescription for an astringent douche. Two weeks later she called to report that everything was all right. In that case, I said, she could stop the douches.

"Thank you, doctor," she said. "Between the douches, the dishes, and the diapers, I've had my hands in water all the time."—F.M.M.

"Doctor," complained the mother of a month-old baby boy, "he gets awfully sore under his genials."
—M.L.R.

Waiting Room Amnesia

It had been a long weary session of evening office hours. Finally I got around to calling a young lady who had been waiting patiently for some time. As she sat down in the chair by my desk, she sighed, "Doctor, I been waiting so long I forgot what I came for."—P.C.J.

NURSING ARTS,
Mildred L. Montag, M.A., R.N., Margaret Filson, M.A., R.N., Saunders, 1948: p. 237—

"Back care cannot be over-emphasized."

p. 377—

"The practice of rubbing the skin, particularly the back, with alcohol to prevent pressure sores is not altogether logical. Alcohol is drying and a dry skin is more susceptible to cracking and irritation than is a somewhat oily skin surface . . . Therefore, some kind of lubricant, such as a lotion, seems to be indicated in the care of the back."

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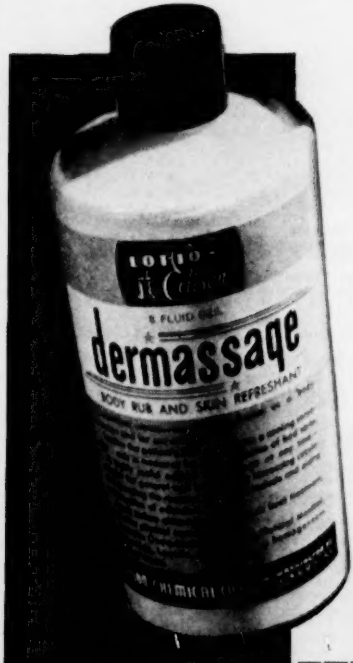

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